Textile Industries

JUNE, 1949

formerly COTTON Textile Industries

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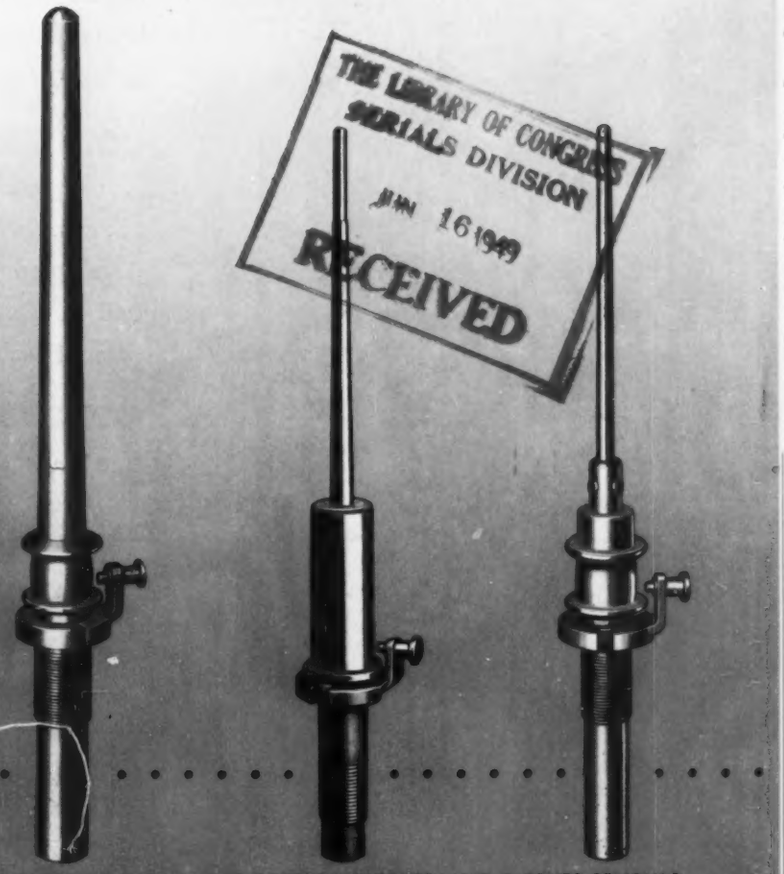
JUN -6 1949

PER. SECT. 23

Marquette ROLLER BEARING SPINDLES *with* FULL-FLOATING FOOTSTEP BEARING

For Cotton, Rayon, Nylon, Wool, Worsted

Marquette Roller Bearing Spindles give you *more yarn at lower cost*—by operating with large packages at high speeds, with less power consumption. Modernize your old frames with Marquette Roller Bearing Spindles, or specify them on new frames.



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Volume 113 Number 6

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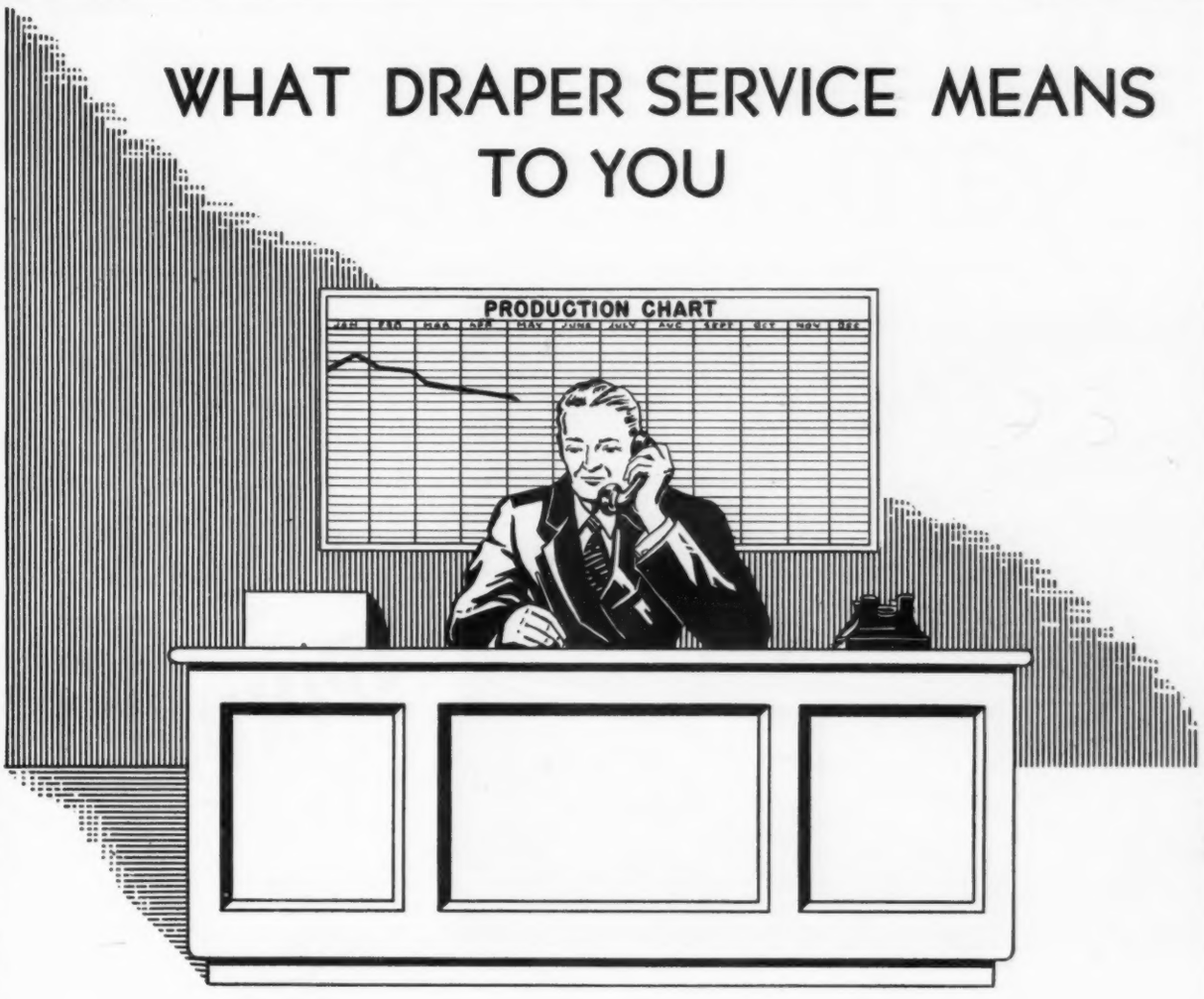

If you are plagued by bad cloth or a new style is giving you trouble and your profits are disappearing in today's highly competitive market, a Draper Serviceman may be able to help you. These skilled technicians are able to draw upon a fund of over 50 years accumulated knowledge of the art of weaving on automatic looms. You can bank on their advice.

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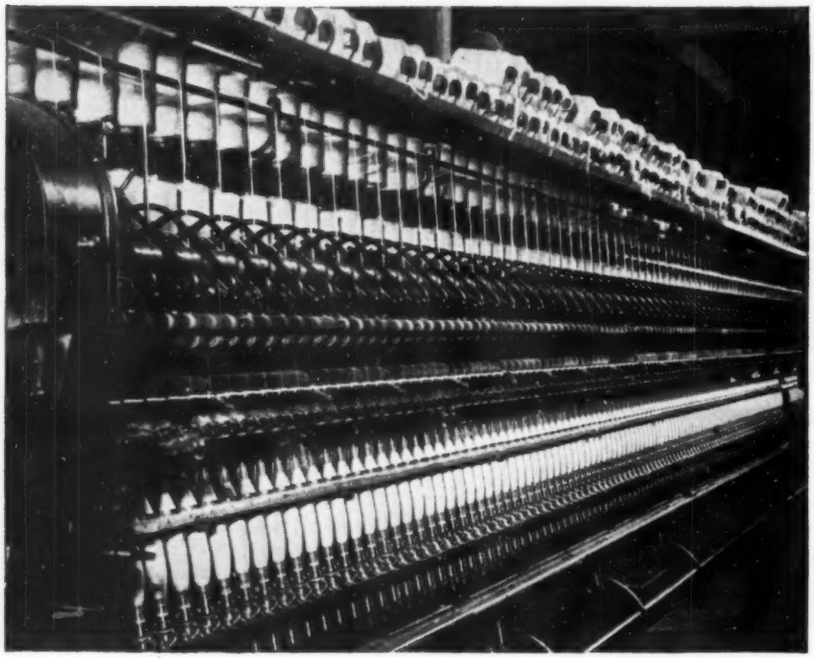
for better yarn... better



Assure higher quality, greater production, lower costs with Texaco Spindura Oils

HIGH spindle speeds call for lubricants with high resistance to oxidation, thickening and fogging . . . and *Texaco Spindura Oils* meet these requirements 100%. Thus, when you "Spin With Spindura", your production of first-quality yarn goes up—your costs go down.

Texaco Spindura Oils are specially processed to prevent formation of gummy deposits. They reduce vibration, hunting and lagging . . . eliminate wasteful power "drag" . . . let you run heavy packages at full speed . . . assure smoother, cleaner, more uniformly twisted yarn with fewer ends down.

There is a complete viscosity range of *Texaco Spindura Oils* to meet all spindle manufacturers requirements for the effective lubrication of spinning, throwing, spooling and twisting spindles.

Let a Texaco Lubrication Engineer show you how you can increase efficiency and reduce costs throughout your mill. Call the nearest of the more than 2300 Texaco Wholesale Distributing Plants in the 48 States, or write The Texas Company, 135 East 42nd Street, New York 17, N. Y.

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FOR THE TEXTILE INDUSTRY

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Textile Industries

June, 1949

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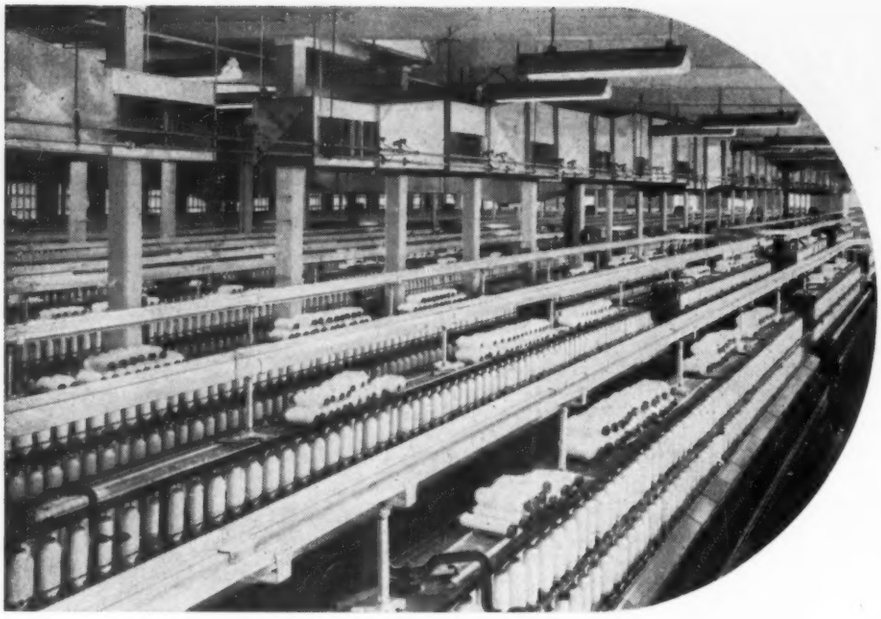
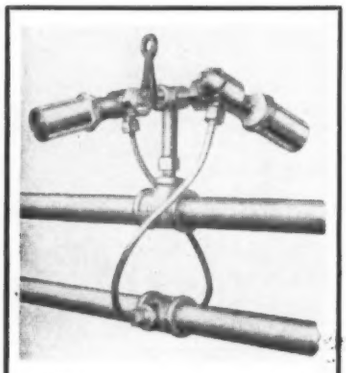


A typical WHITE & CO. spinning room installation with dry duct system and JACKSON automatic self-cleaning Atomizers at HART COTTON MILLS, INC., Tarboro, N. C.



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6) Conserves horsepower
7) Operates each time control functions
8) Minimum maintenance
9) Automatic self-cleaning
10) Uniform humidity

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NO IDLE LUXURY

Mr. Mill Operator, do you realize the dangerous risk involved when you ignore the importance of air conditioning in the successful operation of your plant? The danger is three-fold: It threatens the quality of your product, the health and efficiency of your employees, and finally the income you derive from your business. Control humidity and temperature in your mill and you control static, soilage, machine adjustment, labor efficiency, the variable quantity in regain . . . and assure yourself a smoother, *safer* running plant.

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Rayon Reports

Published Monthly by American Viscose Corporation, New York, N.Y.

Avisco Operates Complete Development Plant to Improve Rayon Staple

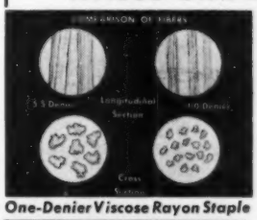
As part of its broad program of research, American Viscose Corporation operates a Staple Development plant at Nitro, West Virginia. Its dual purpose is to serve as a proving ground for the practical development of manufacturing methods as well as to develop new products.

In performing experimental work Staple Development can duplicate both laboratory and plant processes. Because virtually every part of the rayon staple process can be altered at will, it is possible to test production through various stages starting with small batches of spinning solution and gradually working up to commercial scale production. At various points during experiments Staple Development makes use of data which may come from Chemical Research, Textile Research or Fabric Development.

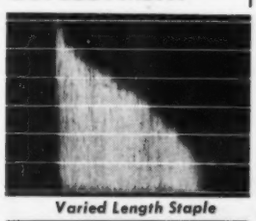
The Staple Development plant makes it possible, within limits, to give the textile industry the type of rayon staple it requires. Trial lots of new products are often made available to customers who may experiment with them on their own machines and make them into garments for wear tests, marketing or style research. Its work has helped make rayon staple the fastest growing product in the rayon industry.

Detailed information on the Avisco Staple Development plant has been compiled in booklet form. Copies are available on request.

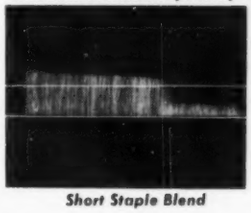
RESULTS OF THE WORK OF AVISCO STAPLE DEVELOPMENT



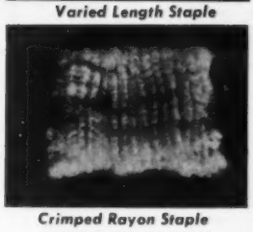
One-Denier Viscose Rayon Staple



Varied Length Staple



Short Staple Blend



Crimped Rayon Staple

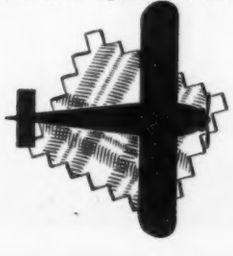
Avisco Releases Training Film for Retail Salespeople

"Your Attitude is Showing," an 11-minute color and sound film strip addressed to retail salespeople has just been released by American Viscose Corporation. The film strip dramatizes how salespeople can improve sales by giving positive, concrete answers to the five questions most customers ask about fabrics. Based on a survey by New York University School of Retailing, these questions are: Is it washable? Will it shrink? How will it iron? Will it wear well? Will it soil easily? The film strip is part of a sales training unit including leaflets, sound record, user's guide. The unit is being made available to retailers at cost.

RAYON 20 YEARS AGO

NEW YORK, June, 1929 — The second edition of the "Story of Rayon" published by the Viscose Company is now ready for distribution.

NEW YORK, June, 1929 — The promise of a big demand for artistic and durable fabrics for upholstering airplane interiors has spurred rayon producers to much constructive experimentation.



LONDON, June, 1929—The use of the word "rayon" is progressing. The British paper exclusively devoted to rayon and known as "The Artificial Silk World" has adopted the title of "Rayon Record."

MAKE USE OF *Avisco* 4-PLY SERVICE

To encourage continued improvement in rayon fabrics, American Viscose Corporation conducts research and offers technical service in these fields:

1 FIBER RESEARCH
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Speaking as your Superintendent, I say

Gentlemen, right now it's doubly wise ...to SACO-LOWELLize!

We're in a competitive market, and buyers are becoming more and more quality-conscious. This is challenging, in view of the well-known fact that the current crop of cotton is inclined to be neppy and full of pepper trash.

You know that to maintain our brand name standards our equipment must be as good or better than our competitors' . . . Let's briefly analyze the SACO-LOWELLizing program, and see if it can help us.

1. Take our OPENING and CLEANING — is our equipment *adequate* for the kind of cotton we are forced to buy today?
2. Are our *cards* equipped with CONTINUOUS STRIPPERS?
3. Do we have the latest type of CONTROLLED DRAFT DRAWING?
4. Are our ROVING FRAMES equipped with a modern controlled draft system?
5. Can they produce packages which give greatest economy in the Card and Spinning room?
6. Are our FLYERS and SPINDLES in good condition?
7. Is our SPINNING wide gauge with large packages; is it equipped with the modern drafting elements, power-saving spindles, and long-life roll covering?
8. Is our maintenance program effective; are our frames lined and levelled and in good operating condition; do we use genuine SACO-LOWELL repair parts for replacements?

If your answers to any of these 8 important questions show that you can improve your competitive position, you are invited to consult an engineer from SACO-LOWELL! Write our nearest Sales Office.

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These modern ROSS Air Systems are not merely a grouping of units but complete, carefully engineered systems designed to form an integral part of the plant's processing equipment. They embody, as required, panel constructed hoods for dye jigs, dry cans, etc., vapor absorption and exhaust apparatus, air make-up, roof heating and ventilating ducts, waste heat recovery apparatus, cooling systems for aisles, motors, generators, etc. and room air conditioning. Long experience with industrial air handling problems is reflected in the advanced design and construction of ROSS Air Systems for textile plants. Let us survey your requirements. Contact our office nearest to you.

ROSS Transite Hood over Dye Jigs. Note ducts and outlets for comfort cooling in operating aisles.

Entering end, ROSS Festoon Dryer, 440 feet long, for awning cloth.

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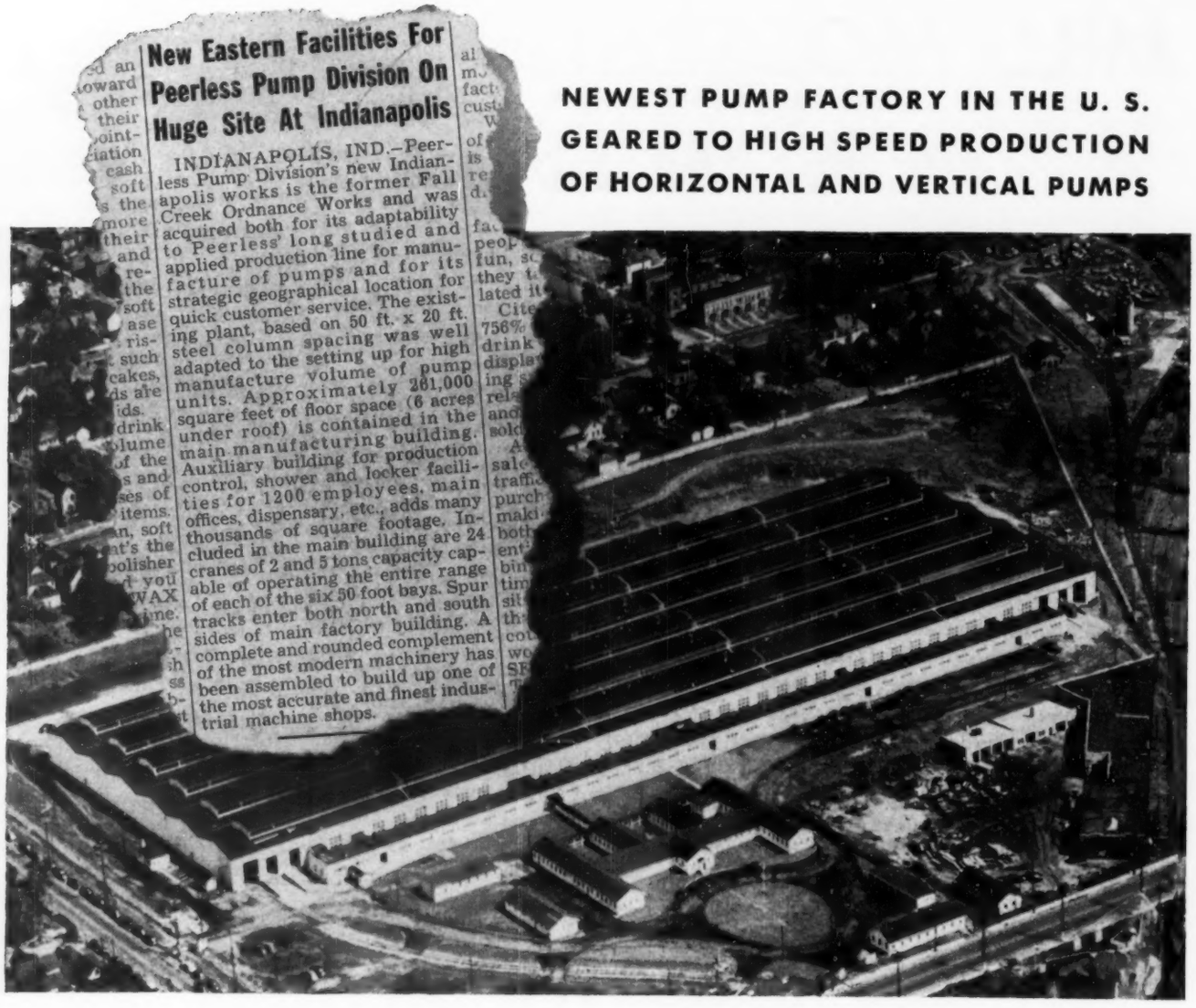
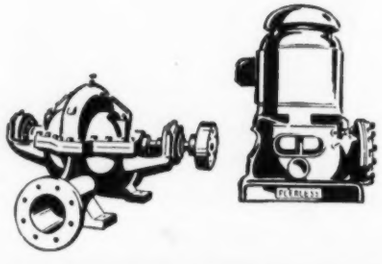

New Eastern Facilities For Peerless Pump Division On Huge Site At Indianapolis
INDIANAPOLIS, IND.—Peerless Pump Division's new Indianapolis works is the former Fall Creek Ordnance Works and was acquired both for its adaptability to Peerless' long studied and applied production line for manufacture of pumps and for its strategic geographical location for quick customer service. The existing plant, based on 50 ft. x 20 ft. steel column spacing was well adapted to the setting up for high manufacture volume of pump units. Approximately 261,000 square feet of floor space (6 acres under roof) is contained in the main manufacturing building. Auxiliary building for production control, shower and locker facilities for 1200 employees, main offices, dispensary, etc., adds many thousands of square footage. Included in the main building are 24 cranes of 2 and 5 tons capacity capable of operating the entire range of each of the six 50 foot bays. Spur tracks enter both north and south sides of main factory building. A complete and rounded complement of the most modern machinery has been assembled to build up one of the most accurate and finest industrial machine shops.

NEWEST PUMP FACTORY IN THE U. S. GEARED TO HIGH SPEED PRODUCTION OF HORIZONTAL AND VERTICAL PUMPS

Peerless Pump plant at Indianapolis, Indiana

19 ACRES OF MODERN PLANT FACILITIES DEVOTED EXCLUSIVELY TO MAKING PUMPS

Here is one of America's most modern pump factories. Peerless Pump's new plant at Indianapolis is devoted entirely to making pumps and handling pump service. All types of pumps in the Peerless line, horizontal centrifugal, deep well and close-coupled turbines, Underwriters' approved fire pumps and domestic water systems are made and serviced in this plant. No expense has been spared in tooling Peerless-Indianapolis to insure accurate pump production; testing facilities at Indianapolis are being incorporated into one of the largest pump laboratories in the country. Add these factors to sound basic Peerless pump designs, to the high caliber of Peerless personnel and to Peerless extensive manufacturing facilities at Los Angeles, California, and they combine to make available as comprehensive pump service as is offered to pump owners and buyers anywhere. Peerless-Indianapolis is open for your inspection. You are cordially invited to see for yourself how Peerless-Indianapolis will exactly fit your needs for pumps and pump service. Plan with Peerless; there are horizontal and vertical types for most services, in all industries. Descriptive Bulletins are available on all types upon request.



Peerless
VERTICAL AND HORIZONTAL
Pumps

fmc
PEERLESS PUMP

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You know how tough textile mill drives are on V-Belts. Heavy overloads and high starting torques are common. Misalignment of sheaves and resulting uneven load-distribution accelerate belt wear — cause early failure in most conventionally designed belts.

That's why Goodyear now offers the Textile Special V-Belt designed by the G.T.M. — Goodyear Technical Man — to tame these tough drives. This new V-belt is built around a strength member consisting of several plies of multiple-cord fabric — giving the belt great strength and at the same time assuring the elasticity which permits the belt to tolerate misalignment that would quickly ruin regular belts. The bias-cut envelope or fabric cover of the Goodyear Textile Special V-Belt is designed to provide maximum resistance to surface wear even under difficult conditions.

Ask the G.T.M. about Goodyear Textile Special V-Belts, available in all popular textile mill sizes. Or write Goodyear, Akron 16, Ohio.

For Hose, Flat Belts, V-Belts, Molded Goods, Packing, Tank Lining *built to the world's highest standard of quality, phone your nearest Goodyear Industrial Rubber Products Distributor.*

GOODYEAR

THE GREATEST NAME IN RUBBER

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The *benefits* of plant expansion—with *no extra plant investment!*

SYTON increases the strength of yarns spun on the woolen or worsted system 10% to 30%. Mills profit from this increase in many different ways:

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- Others report fewer ends down during spinning and weaving... which also means more production.
- Still others find they can spin blends hitherto impossible.
- Almost all report they can spin any given stock to a finer count.

Hundreds of woolen and worsted spinners... more every day... are proving that Syton is a practical production speeder... a money maker for mill management.

Why not find out today how much Syton can mean to your mill? Our technical staff stands ready to help. Just send the handy coupon on the right.

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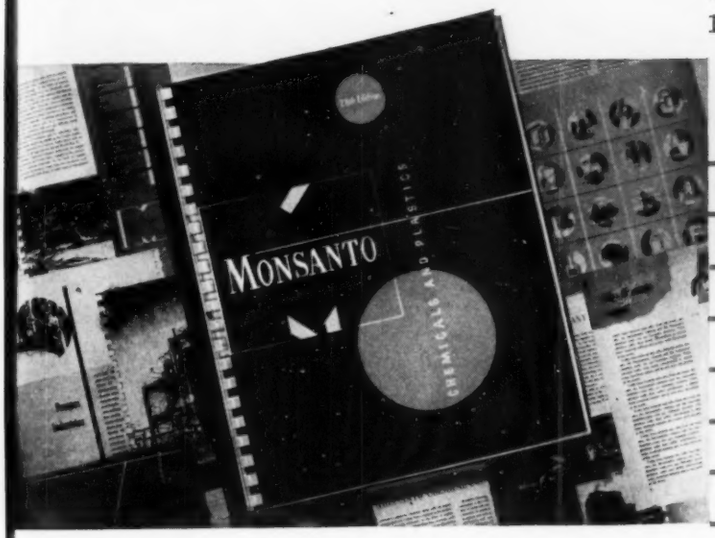
If your business uses chemicals or plastics, ask for your free copy of the 28th edition of "Monsanto Chemicals and Plastics"... the new Monsanto Catalog, just off the press. It has many improvements over previous editions, making it even more useful to you. The 28th edition is packed with information you will want at your fingertips. For your free and postpaid copy, mail the coupon or write: MONSANTO CHEMICAL COMPANY, Textile Chemicals Department, 140 Federal Street, Boston 10, Massachusetts.



QUICK FACTS about Monsanto's New Catalog

1. Describes more than 400 products.
2. Contains 176 pages (8½ x 11 inches).
3. Bound in plastic, opens flat.
4. Indexed for easy reference.
5. Contains many useful charts.
6. Has numerous interesting illustrations.
7. Gives useful product data such as

Typical analysis	Molecular weight
Specifications	Properties
Grades	Uses
Standard form	Shipping classification

NEW Catalyst AC

For Rapid, Thorough Curing of Melamine and Urea Finishes

- Longer useful bath life.
- Faster Curing.
- Good Washfastness.
- Less danger of residual odor.
- Less need for critical temperatures in Pad Box.

New Catalyst AC gives longer useful bath life and induces better resin retention than any other commercial catalyst. In some cases, Catalyst AC gives resin baths more than twice the useful life possible with usual catalysts. Resin retention is equal or better, and curing rates are equal to or faster than those obtained with diammonium phosphate.

BATH STABILITY AT 25° C.

Bath Solution	*With 6% DAP (35% sol.)*	*With Catalyst AC*
20% Resloom HP	1 hour*	11 hours
33.3% Resloom M-75	15 hours	Stable after 24 hours
36.4% Urea-formaldehyde	8 hours	Stable after 24 hours

*Note: DAP is not *recommended* for Resloom HP.

Please send the handy coupon for more information on new Catalyst AC.

MONSANTO CHEMICAL COMPANY, Textile Chemicals Department
Desk TIT18, 140 Federal Street, Boston 10, Mass.

☐ Please send me a copy of the 28th Edition of "Monsanto Chemicals and Plastics", ☐ Information on Syton for spinning, ☐ Information on Catalyst AC.

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. . . With JENKIN'S Dynamically Balanced SPINNING CYLINDERS

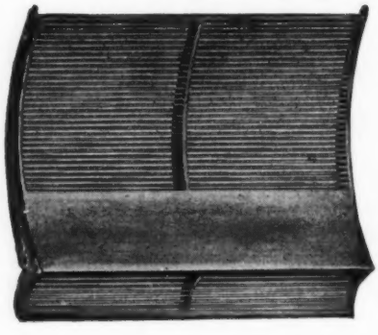
© JENKINS METAL SHOP

Take those vibrating cylinders off your "payroll" . . . replace them with Jenkins Dynamically Balanced cylinders, and watch operating costs go down and yarn quality go up.

PROMPT SERVICE

Our expansion program is completed, our production more than doubled, and we are happy to announce that we can give much better service on all orders for spinning cylinders . . . also picker and card screens.

Don't waste time wondering what Jenkins Dynamically Balanced cylinders can do for you . . . place your order now—or write today for complete information.

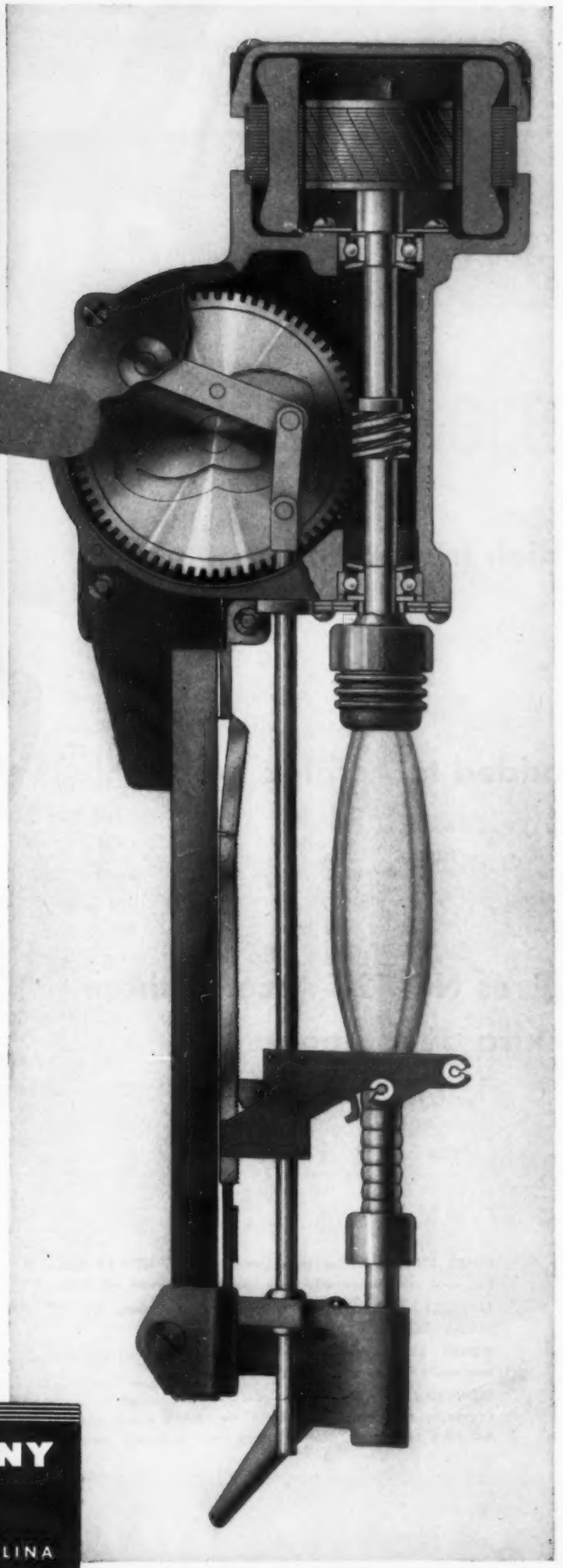


JENKINS METAL SHOPS Incorporated

GASTONIA, NORTH CAROLINA

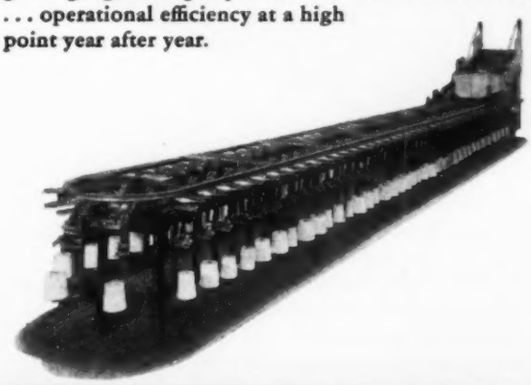
ABBOTT Automatic QUILLERS

Only 4 Moving Parts
DRIVE THE SPINDLE AND TAKE THE TRAVERSE MOTION OUT TO TRAVERSE GUIDE



Simplicity of the Winding Unit on ABBOTT Automatic Quiller *Reduces Costly Repairs!*

The mill that wants to make a better fabric will switch to Abbott Quillers to wind their filling bobbins. This Traveling Spindle Unit has a double throw cam which winds overlapping layers at both the tip and base of the conical section of the bobbin, which produces a bobbin of superior weaving characteristics. Simplicity of design, with less moving parts and the elimination of hard-to-get-at gadgets keep repair and maintenance costs down . . . operational efficiency at a high point year after year.



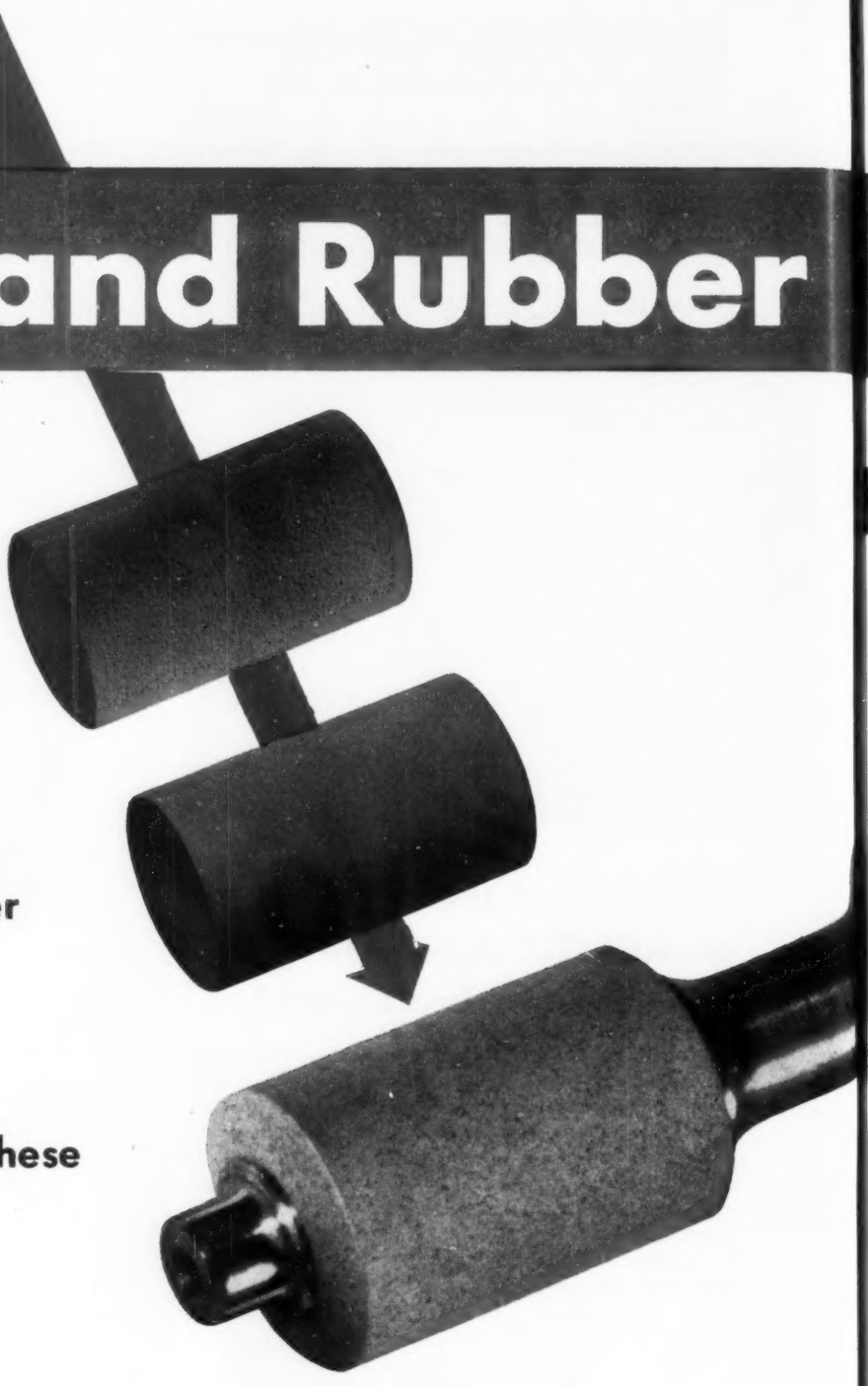
ABBOTT MACHINE COMPANY
FACTORY AND MAIN OFFICE:
WILTON, NEW HAMPSHIRE
SOUTHERN OFFICE: GREENVILLE, SOUTH CAROLINA

Cork and Rubber

High friction cork

added to Accotex rubber

gives NC-727 Accotex these extra advantages:



LONG SERVICE—after long initial service, NC-727 Accotex cots can be rebuffed as many as five or six times.

REDUCED EYEBROWING—cork content in Accotex NC-727 retards slicking, thus minimizes eyebrowing.

GOOD START-UP—Accotex cots are non-thermoplastic and resist flattening during shutdown periods.

REDUCED LAPPING—Accotex cots contain electrolytes. Consequently they have no affinity for textile fibers and do not tend to lap up. Nonsweating even in humid weather.

SOLVENT RESISTANCE—Accotex cots are not affected by oil, water, dyes, or any commonly used textile solvent.

SEAMLESS CONSTRUCTION—Accotex cots have no seams, no structural weakness to cause failure in service.

QUICK ASSEMBLY—All Accotex cots are pre-glued for easier, quicker assembly. Thus they reduce roll shop costs.

ACCOTEX COTS
CORK COTS

ACCOTEX cots

KEEP GOOD DRAFTING SURFACE LONGER

Armstrong's NC-727 Accotex Cot
combines cork's grip with rubber's long life.

By adding high-friction cork particles to tough Accotex synthetic rubber, Armstrong produces a long-wearing roll cover that resists slicking . . . the NC-727 Accotex® cot. It has the drafting qualities of cork, plus the long life of synthetic rubber. That's why this general purpose Accotex cot is now serving more spindles than any other roll covering.

In addition, NC-727 Accotex greatly reduces lapping. Like all other Accotex formulations, it contains electrolytes, which eliminate the attraction between the fiber and cot that causes lapping up.

Consider these and the other advantages of NC-727 Accotex listed at left. Then call your Armstrong representative and arrange a test installation of NC-727 Accotex cots on a frame in your own mill.

See for yourself how they help produce quality yarn—with less roll maintenance.

Call your Armstrong man today. Or write Armstrong Cork Company, Textile Products Department, 3606 Arch Street, Lancaster, Pennsylvania. These cots are available for export.

For maximum lap resistance—Armstrong's Accotex J-490, a plain synthetic covering, is especially useful where synthetic fibers are run on cotton system equipment or wherever maximum lap resistance is required. After long initial service life, J-490 cots, like all Accotex cots, can be rebuffed five or six times. You get these extra lives for a few cents per roll. For minimum eyebrowing use J-490 with revolving clearers.

Whether you are spinning cotton, wool, or synthetic fibers, Armstrong can supply you with a cover especially formulated to fill your requirements. These covers are available for export.

ARMSTRONG'S ACCOTEX COTS

For Blending, Opening, Tinting and Lapping Synthetic Fibres

The ALDRICH - LUMMUS

Synthetic Fibre Blending System

Provides a simple, compact, flexible and efficient method for producing finished laps from raw stock in one continuous range of automatic machinery.

The weighed mix is fed into a supply feeder, and is blended, opened, tinted and delivered to a single-process picker, from which finished laps are taken without any intermediate hand work. The whole process is automatic.

AldricH MachinE

Greenwood WorkS South Carolina

Bright Prospect in a Grey Mood ...BY HOCKANUM

In dyeing, grey shades have always been associated, in a wry sense, with the grey hairs of dyers who have been searching for a grey dyestuff with good dyeing properties and maximum light fastness.

But today such textile leaders as Hockanum Woolens, creator of the worsted shown above, are getting excellent results by putting their confidence in Sandoz colors.

Two Sandoz achievements which have simplified dyers' problems in obtaining grey and pearl shades are

Alizarine Light Grey G Pat

a homogeneous dye of unusual dyeing properties and light fastness, which is recommended for acid dyeing of yarn and piece goods; and for acid or chrome dyeing of raw stock and worsted top:

Alizarine Light Grey RLL Pat

which has a degree of fastness to light, carbonizing and decatizing unequalled by any combination of chrome colors.

And for any chrome, acid or direct dyes . . . or auxiliary chemicals . . . for both natural and synthetic fibres . . . be guided by the successful "color achievements" you see in these Sandoz advertisements.

SANDOZ CHEMICAL WORKS, INC., 61 VAN DAM STREET, NEW YORK 13, N.Y.

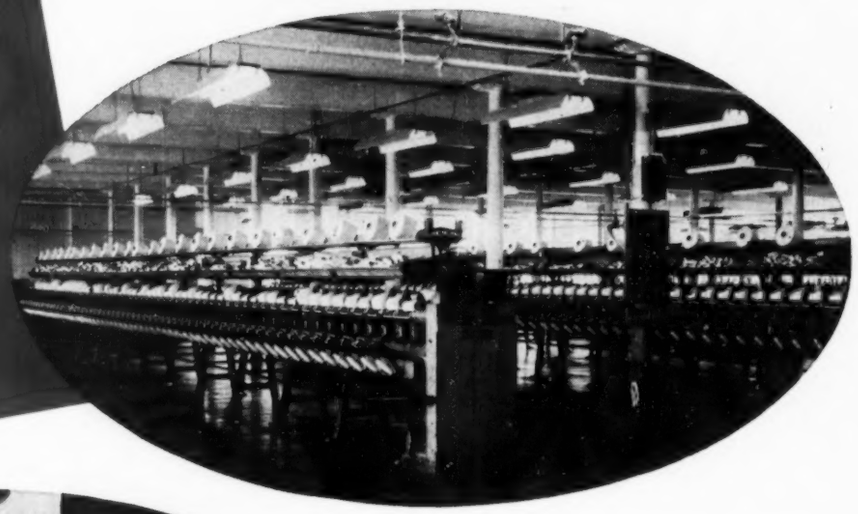
Application laboratories and stocks at Boston, Philadelphia, Charlotte, Chicago, Los Angeles, Toronto • Other branches at Providence, Paterson and Montreal

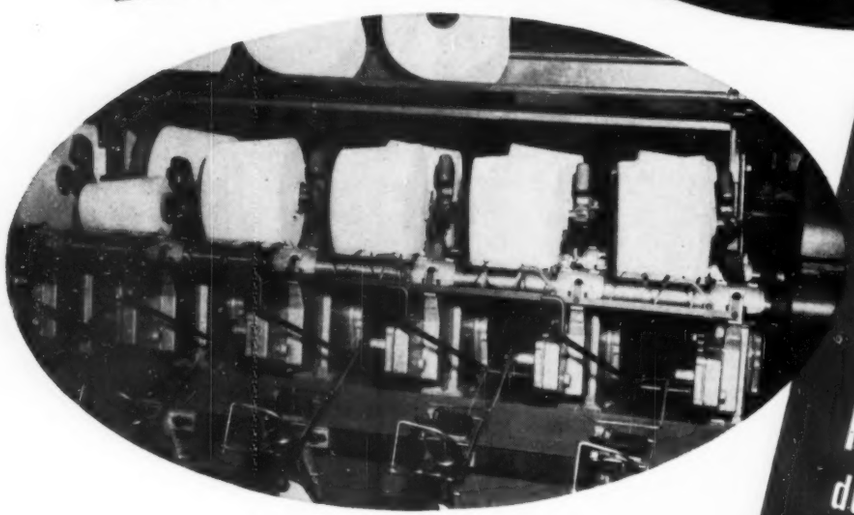
SANDOZ *thinks ahead with textiles*

SMOOTH WINDING of Spun Rayon at Paul Whitin Company

Spun rayon yarn is wound onto warping cones at the Paul Whitin Company, Northbridge, Mass., by the Roto-Coner*, the modern drum winder built around the exclusive rotary traverse.

This grooved roll, in addition to rotating the winding package, also traverses the yarn. Both the conventional reciprocating guide and the slip drum are eliminated, and with them, a constant hazard to yarn quality.

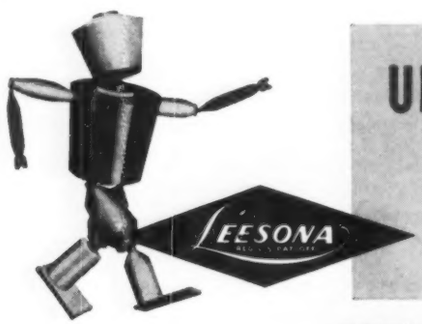




SMOOTH OPERATION of Roto-Coners* due to Modern Design

The streamlined design of the Rotor-Coner* winder provides many operating conveniences. Starting handles, tensions and shelf for finished packages are conveniently located. Lint-proof housing protects the operating mechanism, open design makes cleaning easy. A conveyor belt takes away empty bobbins. And the machine runs quietly, without annoying clatter.

In the photograph, note the cast-iron rolls recommended for spun rayon and also the combination blade-and-needle slub catchers.



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* Reg. U. S. Pat. Off. **ROTO-CONER*** *the only machine with the rotary traverse*

STANDARD Durene*

will boost your production and sales of quality knit goods . . .

Made of Durene®
multi-ply mercerized combed cotton yarn
4 WAYS BETTER
than ordinary cotton yarns
EXTRA COMFORT
---more absorbent
EXTRA STRENGTH
---longer wear
EXTRA QUALITY
---lasting lustre
EXTRA SERVICE
---easy to wash
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Standard Durene's lustre, uniformity and smooth, even running prove a boon to Durene licensees. . . make it easier to meet Durene quality standards . . . enable you to concentrate on workmanship and serviceability.

If you are not a Durene licensee and want to qualify so that you can ride in on the big national Durene campaign . . . 15 full color pages promoting Durene sales in the Saturday Evening Post, Ladies' Home Journal, Good Housekeeping . . . use Standard Durene, a superior quality controlled mercerized yarn . . . made in our own plants *under our complete control of all processing from selected raw cotton to finished yarn. 10's to 120's ply, natural, bleached and dyed.*

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Selo • Preemo • Threads

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Sweating

is "evaporative cooling"

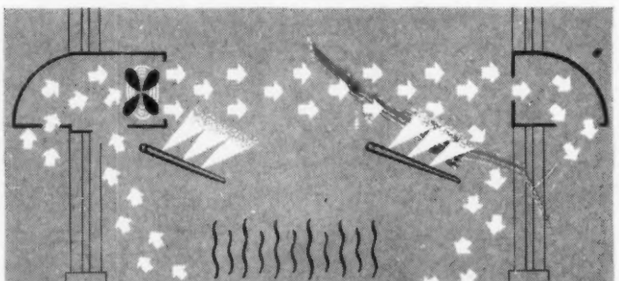
...the hard way!

AMCO EVAPORATIVE COOLING IS THE EASY, INEXPENSIVE WAY to get rid of excessive heat. Because this way doesn't take it out of the worker in sweat and dragging fatigue. It gives precise control of both humidity and temperature which makes for a better product as well as a contented worker.

You already have a part of the system ... humidification. The rest can be easily added, room by room, as you need it. No cumbersome air ducts. Just an air inlet and circulating fan to draw in the correct amount of fresh air and an outlet for automatic exhaustion of excess heat and spent air through controlled vents. Adjustable for frictional heat load of each area. Maintenance kept at a minimum.

Just as simple and easy as it sounds . . . and fully automatic. Ask an AMCO engineer to show you how inexpensively you can make your mill first choice of the most efficient workers, how you can boost both production and quality by the addition of an AMCO Evaporative Cooling System to your present humidification.

AMCO Evaporative Cooling Systems work this way... *A controlled amount of fresh air is drawn into the mill and combined with some re-circulated air. Spray from atomizers introduces extra moisture, raising relative humidity to desired point. Evaporation of moisture absorbs frictional heat, thus reducing excessive room temperature. Spent air is exhausted automatically through controlled vents.*



give you all these advantages... *Increase worker comfort ↑ ↑ ↑ Reduce excessive temperature and hold relative humidity at point best suited to fibre and process ↑ ↑ ↑ Permit faster machine speeds in high friction (heat) areas ↑ ↑ ↑ Assure evener yarn counts and increase breaking strength ↑ ↑ ↑ Gradually increase regain for good roving and consequent better spinning ↑ ↑ ↑ Drafting of fibres smoother and more compact ↑ ↑ ↑ Waste and fly greatly reduced ↑ ↑ ↑ AMCO self-cleaning atomizers assure constant, full capacity delivery . . . no drip . . . no feathering down . . . minimum maintenance . . . long life.*

AMCO

HUMIDIFICATION AND COOLING

AMERICAN MOISTENING CO., AFFILIATED WITH GRINNELL COMPANY, INC., PROVIDENCE, R. I. • BOSTON • ATLANTA • CHARLOTTE

Saco-Lowell opening machines mounted on UNISORB at Anchor Rome Mills, Inc., Rome, Ga., without bolts or lag screws.

Mount Every Kind of Textile Machine on

UNISORB

...AND

Save Your Floors From Drilling!

UNISORB-mounting . . . the *modern* way to anchor every kind of machine on every kind of floor . . . is the anchoring method that requires no bolts, no lag screws, none of the floor damage that goes with old-fashioned anchoring methods.

MOREOVER...

UNISORB absorbs from 60% to 85% of transmitted vibration and noise, often permits higher speed machine operation.

UNISORB saves installation time and money.

UNISORB mounting lasts for many years — requires no maintenance.

For these and other reasons, it will pay you to know the full story behind UNISORB machine mounting.

Clip this coupon or write us on your letterhead... *today.*

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THE FELTERS COMPANY
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Gentlemen:

Please send my free copy of "Why It Pays to Anchor Your Textile Machinery with UNISORB." ( )

Please send my free copy of "Felters Precision Cut Felt Parts Manual." ( )

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KNOCK-OUT STEAM WASTE

with Brown Flow Accounting Meters

Your costs for distribution and utilization of steam (or other fluid) will be known facts with the installation of Brown Flow Accounting Meters. Hourly and daily records from your Brown Flow Meters will enable you to know, not approximate, what is happening . . . where it is happening . . . when it is happening. You can deal a knock-out blow to waste and properly pro-rate expenses for each operation and each department. The Brown Flow Accounting System is producing sensational economies in many plants, repaying the original investment in a very short time.

Check, today, on the application of Brown Flow Accounting Meters to your processes! You can get detailed information in Bulletin 2022 . . . send for your copy!

Bulletin 2022, "Brown Flow Meters for Cost Accounting," is complete and informative. A copy will be sent to you upon request. Write today!

Brown Recording Integrating Flow Meters are not expensive! For example, a complete unit for a six inch steam line costs less than $500.00!

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BROWN INSTRUMENTS DIVISION
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Advanced Instrumentation
FOR THE TEXTILE INDUSTRY

BROWN INSTRUMENTS

WICACO QUALITY Since 1868

This Is Our 81st Anniversary

SPINDLE OILING MACHINE

THE Wicaco Spindle Oiling Machine guarantees proper lubrication for Twisting Spindles, reducing operating costs and giving them longer life. It flushes out the old oil and replaces it with fresh oil in one simple operation. It saves time, labor and power, and guarantees proper oil level at all times.

This efficient machine is used successfully in many mills producing Wool, Cotton, Silk and Rayon. Many textile mills where one was installed have bought additional machines to completely service all their spindles. Order yours today, or send for descriptive folder NOW.

ROLLER BEARING SPINDLES

WE manufacture Textile Spindles of all descriptions for Rayon, Silk, Wool and Cotton. We first introduced Roller Bearing Spindles to the Textile Industry in 1935, incorporating the SKF Roller Bearing type of bolster. Since then we have designed and manufactured many types of spindles for the Textile Industry.

Replace your present spindles, regardless of type, with efficient Wicaco Roller Bearing Spindles to reduce operating costs and increase production. We will design them to meet your particular requirements. Write today for quotations.

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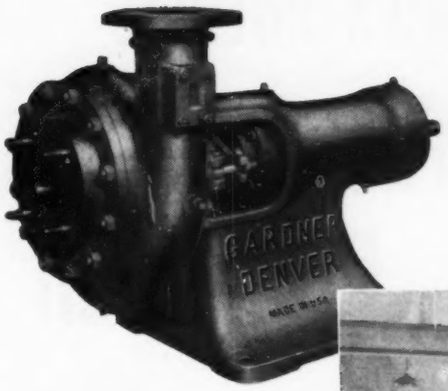
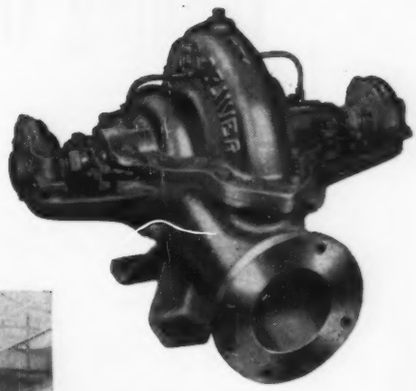
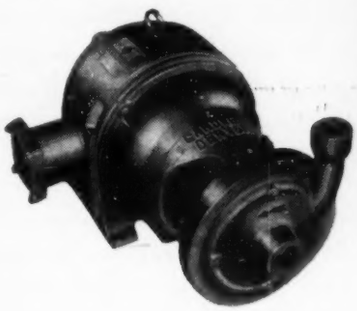


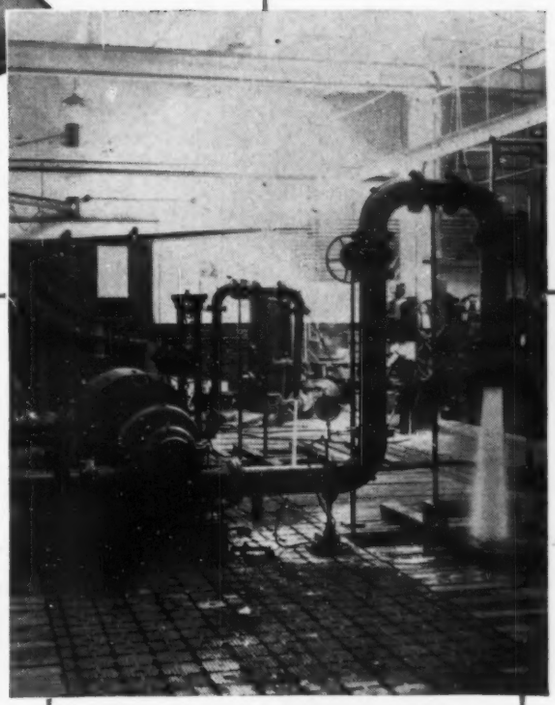
FOR HANDLING FLUIDS CONTAINING SOLIDS up to 6 inches in diameter, Gardner-Denver Sewage and Waste Disposal Pumps are built in capacities from 50 to 5000 gallons per minute.



RUGGEDLY CONSTRUCTED FOR LARGE CAPACITY Gardner-Denver Horizontally Split Case Double Suction Centrifugals are available in sizes for all heads up to 300 feet.

COMPACT Gardner-Denver Close-Coupled Centrifugal Pumps may be installed in any horizontal or vertical position—are designed for capacities up to 250 gallons per minute and heads up to 250 feet.





Gardner-Denver's modern hydraulic testing laboratory, showing centrifugal pump direct connected to Dynamometer for efficiency test.

FOR GENERAL UTILITY SERVICE Gardner-Denver Side-Suction Centrifugal Pumps are made in capacities up to 1600 gallons per minute and heads up to 100 feet.

Fully Tested For Full-Value Efficiency Gardner-Denver Centrifugal Pumps

Since 1859

You can be sure of getting *full-value* efficiency on every one of your pumping jobs when you insist on Gardner-Denver *fully tested* Centrifugal Pumps. For every Gardner-Denver pump you buy has already proved its dependability and power economy — through thorough and accurate testing in our modern hydraulic laboratory, completely equipped with the best and most accurate testing equipment available. It's no wonder these popular pumps so easily attain and often exceed their rated efficiencies in hundreds of different kinds of pumping installations.

For expert advice on selecting just the right Gardner-Denver Centrifugal for any installation, or for further information on any of the pumps described here, write Gardner-Denver Company, Quincy, Illinois.

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Birmingham, Ala.
Boston, Mass.
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New Orleans, La.

fanning the flames of '49's hottest

Fashion Cotton Promotion

fashion accents crisp!
AGREES DESIGNER
frances sider
Miss Sider interprets the important new "crisp look" with this striking sarong skirt (starched with LINIT!*) worn over an elasticized swim suit of the same Ever-fast cotton print.
The Crisp Look is the smart look for 1949..."Starch with LINIT!" say the leading dress designers ...this superior laundry starch makes a thin mixture that penetrates the fabric, restores its original finish... keeps it crisp, fresh, cool-feeling between washings... LINIT is easy to use, safe, perfect.
LINIT
PERFECT LAUNDRY STARCH
MAKES COTTON LOOK AND FEEL LIKE LINEN
..adds the "finishing touch"
to dresses, blouses, children's clothes, housecoats, men's shirts, curtains, bed and table linens. Directions on every LINIT package. All grocers sell LINIT.
*LINIT is a registered trade-mark of Corn Products Refining Co., N. Y.

THE CRISP LOOK OF SUMMER COTTONS

... Was launched by Corn Products Refining Company with a spectacular fashion show February 2.

... Is headlined month after month in LINIT Starch ads (mostly full color!) in *Life, Ladies' Home Journal, McCall's, Woman's Home Companion*—16 national magazines *with circulation exceeding 30 million.*

... Has inspired major editorial features in seven fashion-setting magazines during April, May, June... and in newspapers across the country.

... Has been hailed by America's ready-to-wear leaders as summer's Number One cotton promotion theme.

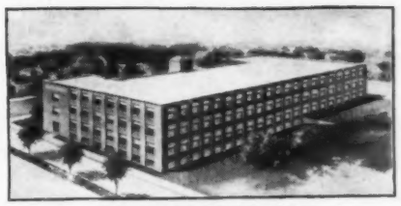
Cultivate the Crisp Look for bumper sales!

CORN PRODUCTS SALES CO.

Suppliers of Starches for The Textile Industry

17 Battery Place **New York 4, N. Y.**

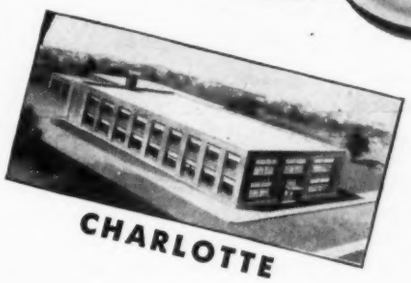
FALL RIVER



WORCESTER

PHILADELPHIA

TO SERVE PROPERLY



CHARLOTTE

GREENVILLE

ATLANTA

TEXTILE SUPPLY CO.
DALLAS
(not shown)

Change is common to all industries and those who serve them must change also, if they are to serve properly.

During more than a half century of service to the textile industry, Ashworth's policy has never been static. New products, improvements in old products, new repair shops and new factories have been added as the need arose. Today we can properly serve all members of the textile industry in all areas with 4 factories, 6 repair shops and 7 distributing points, including our new modern factory at Greenville, S. C.

But Ashworth Service goes beyond the manufacturing of a complete line of top quality card clothing products. It also includes a free advisory service regarding the correct wire and foundation for a given purpose and correct card settings and speeds; PLUS complete free card surveys with written reports which enable mills to plan repairs over a period with minimum loss of production time. We make our surveys regularly for many leading cotton mills, while our recommendations have enabled woolen mills, in some cases, to increase their card production as much as 30%.

Write us at Fall River and tell us your card clothing problem.

PRODUCTS AND SERVICES

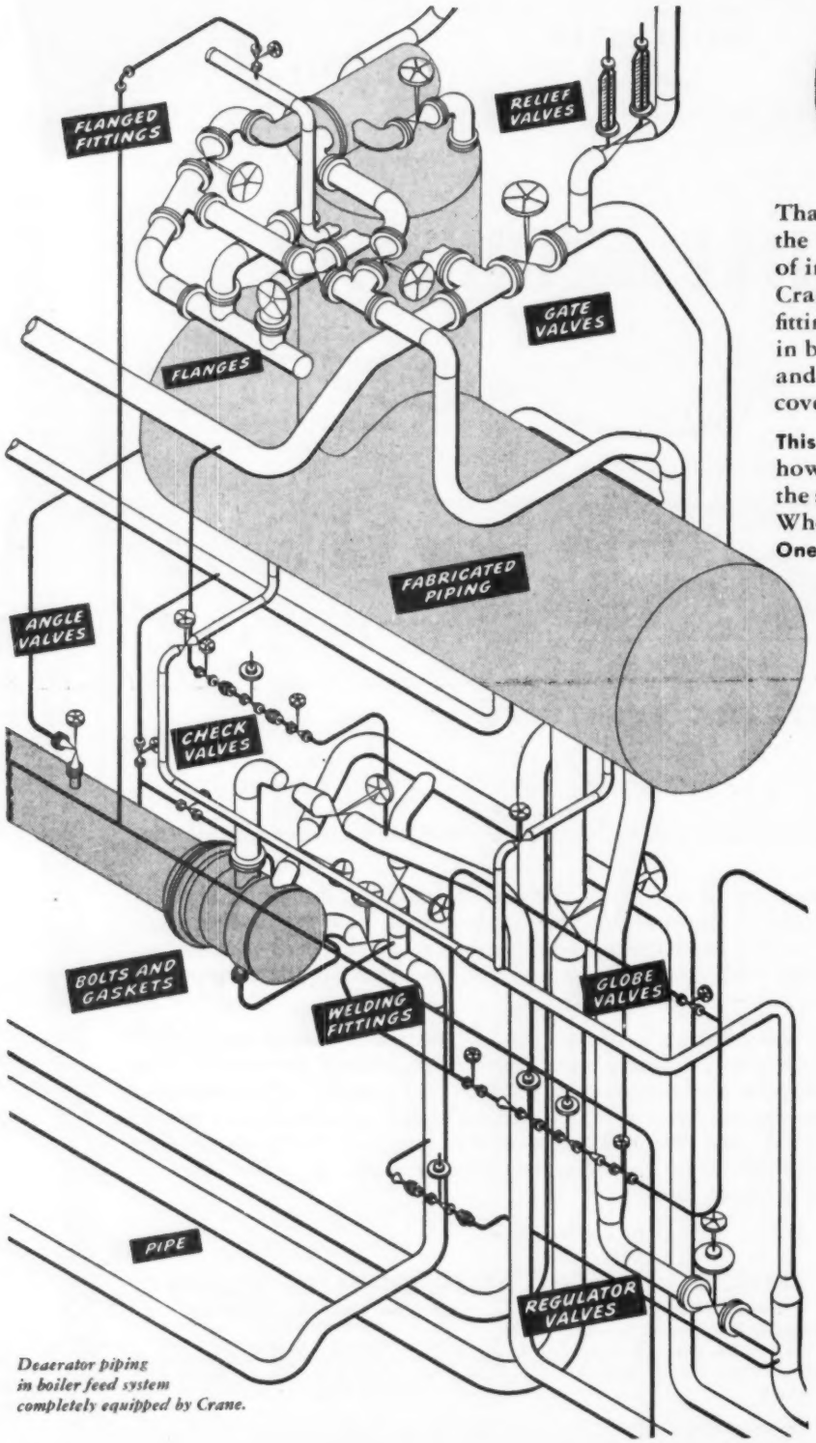
Card Clothing for Cotton, Wool, Worsted, Silk Rayon and Asbestos Cards and for all types of Napping Machinery. Brusher Clothing and Card Clothing for Special Purposes. Lickerin Wire and Garnet Wire. Sole Distributors for Platt's Metallic Wire. Lickerins and Top Flats Reclothed.

ASHWORTH BROS., INC.
AMERICAN CARD CLOTHING CO.
(Woolen Div.)
FALL RIVER *†‡ WORCESTER*‡
PHILADELPHIA*†‡ ATLANTA†‡ GREENVILLE†‡*
CHARLOTTE†‡ DALLAS†‡ (Textile Supply Co.)
*Factory †Repair Shop ‡Distributing Point

Ashworth PIONEERS IN CARD CLOTHING

4 FACTORIES • • • 6 REPAIR SHOPS • • • 7 DISTRIBUTING POINTS

Everything in piping...for every need ...on one order to CRANE



Deaerator piping in boiler feed system completely equipped by Crane.

ONE SOURCE OF SUPPLY
RESPONSIBILITY
STANDARD OF QUALITY

That's the kind of service you get from Crane, the world's leading manufacturer and supplier of industrial piping equipment. "Everything" at Crane includes an unequalled selection of valves, fittings, fabricated piping, pipe and accessories—in brass, iron, steel and alloys. One catalog . . . and one order to your nearest Crane Branch cover whatever is needed for the job.

This Deaerator Piping, for example, illustrates how completely Crane supplies everything for the system, regardless of the fluids to be handled. When you standardize on Crane, you depend on **One Source of Supply** broad enough to simplify every piping procedure. You get better installations . . . avoid needless delays . . . by placing **Undivided Responsibility** on Crane for materials. And for **Highest Quality** in every piping item, specify Crane Quality—unsurpassed for more than 90 years.

CRANE CO., 836 S. Michigan Ave., Chicago 5, Ill.
Branches and Wholesalers Serving All Industrial Areas

FOR TOUGH STEAM SERVICES *up to 750 deg. F., and for water, oil, air, gas and other non-lubricating liquids up to 500 deg. F., Crane recommends No. 47XR 150-pound Cast Steel Wedge Gate Valves. Designed for tight seating with long-lasting Exelloy to Nickel Alloy. Screwed, flanged or welding ends. Sizes: 2 in. and larger. See your Crane Catalog, p. 304.*

EVERYTHING FROM . . .

VALVES • FITTINGS
PIPE • PLUMBING
AND HEATING

CRANE

FOR EVERY PIPING SYSTEM

Acetamide

(Ethanimide: Acetic Acid Amine)

99% TECHNICAL—99.5% REAGENT

Another ORGANIC for Industry by

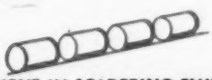
BAKER & ADAMSON B&A QUALITY STANDARD OF PURITY

PROPERTIES:

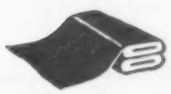
Formula	$CH_3CO \cdot NH_2$
Mol. Wt.	59.07
Boiling Point	222°C.
Melting Point	81°C.
Specific Gravity	1.159 (gms/ml) at 20°C.

Soluble in water and alcohol; very slightly soluble in ether.

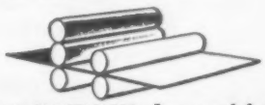
REMARKABLE SOLVENT PROPERTIES for a wide variety of organic compounds. Acetamide can be readily linked to hydrocarbons through its methyl group; to ketones, esters and acids through its carbonyl group; to alcohols and water through its tautoric hydroxyl group, and to ammonia and ammonia derivatives through its amino group.



INGREDIENT IN SOLDERING FLUXES for tin or tinned metals, particularly in high speed lines . . . Acetamide helps promote an even flow and distribution of flux.



IN TEXTILE DYEING: Acetamide may be used as a solvent for dyestuffs whose utility is limited by poor solubility. In such applications, Acetamide also acts as a wetting agent and a penetration accelerator for the dye.



AS A PLASTICIZER: Is a useful plasticizer for glue, gelatin, leather and various films and coatings.

FOR THERMOPLASTIC ADHESIVES: Acetamide is also used for the preparation of anhydrous thermoplastic adhesives which are particularly valuable for sealing cardboard food containers, since they are non-toxic, odorless and chemically neutral.

• **ACETAMIDE** is available in PBL* fibre drums—100 and 225 pounds net.

✓ **SAMPLES ON REQUEST**—write on your business letterhead to nearest Baker & Adamson office listed below.

* polythene bag liner

REAGENTS

B&A STANDARD OF PURITY

FINE CHEMICALS

BAKER & ADAMSON *Reagents*

GENERAL CHEMICAL DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 RECTOR STREET, NEW YORK 6, N. Y.

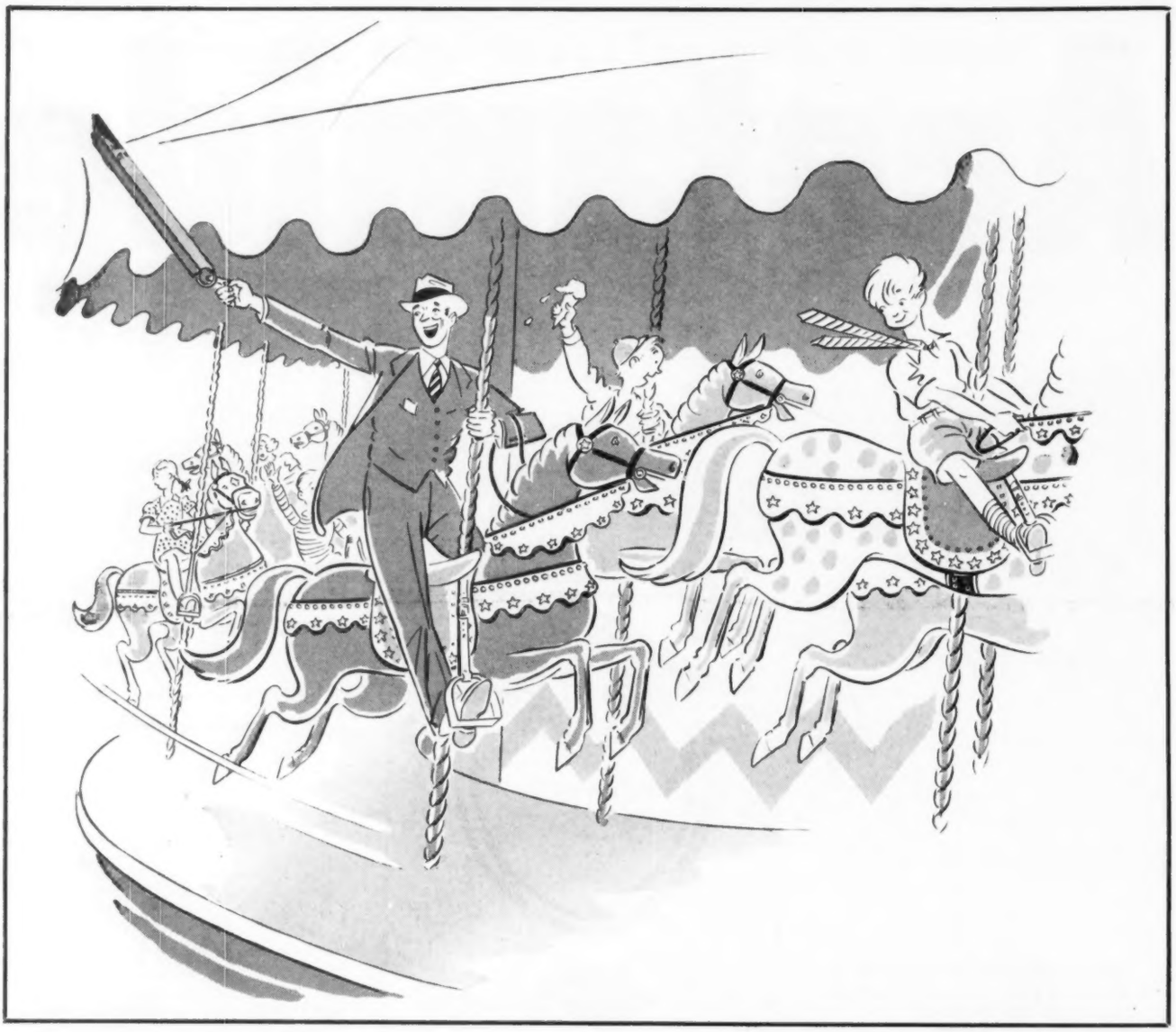
Offices: Albany* • Atlanta • Baltimore • Birmingham* • Boston* • Bridgeport* • Buffalo* • Charlotte* Chicago* • Cleveland* • Denver* • Detroit* • Houston* • Kansas City • Los Angeles* • Minneapolis New York* • Philadelphia* • Pittsburgh* • Portland (Ore.) • Providence* • St. Louis* • San Francisco* Seattle • Wenatchee (Wash.) • Yakima (Wash.)

In Wisconsin: General Chemical Company, Inc., Milwaukee, Wis.

In Canada: The Nichols Chemical Company, Limited • Montreal* • Toronto* • Vancouver*

SETTING THE PACE IN CHEMICAL PURITY SINCE 1882

* Complete stocks are carried here.



You Can Really Go Places on this "MERRY-GO-ROUND"!

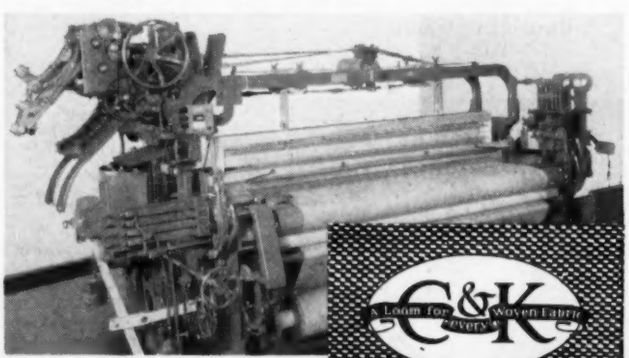
EXTRA VERSATILITY for the new C&K W-3 All-Purpose Looms is made possible by C&K's "Merry-Go-Round" (or tricolor) feature:

This exclusive feature permits automatic bobbin-changing operation on a 4x2 box automatic basis, for weaving 3 colors or kinds of filling, taking 1 pick at a time from each color or class . . . with each of the 3 shuttles picking once in turn.

On the same basis, the new W-3 Loom may be operated to mix 1 color of filling . . . a single pick at a time . . . from 3 shuttles running in rotation . . . for contrasting warp and filling fabrics, or where uneven appearance is hard to avoid.

What's more, this same loom can be quickly and easily converted to a 4x1 box automatic bobbin-changing loom . . . or to a 4x4 box non-automatic loom for pick-and-pick work, where as many as 7 colors of filling may be called at will.

This "Merry-Go-Round" feature . . . plus other exclusive C&K features like the new all-purpose take-up, full automatic letoff, positive shedding, and closer timing . . . give you a range of operating flexibility which you can get from no other weaving machinery. Write for complete details on each of these features.



CROMPTON & KNOWLES LOOM WORKS • Worcester 1, Mass.

PHILADELPHIA, PA. • CHARLOTTE, N. C. • ALLENTOWN, PA. • CROMPTON & KNOWLES JACQUARD & SUPPLY CO., PAWTUCKET, R. I.

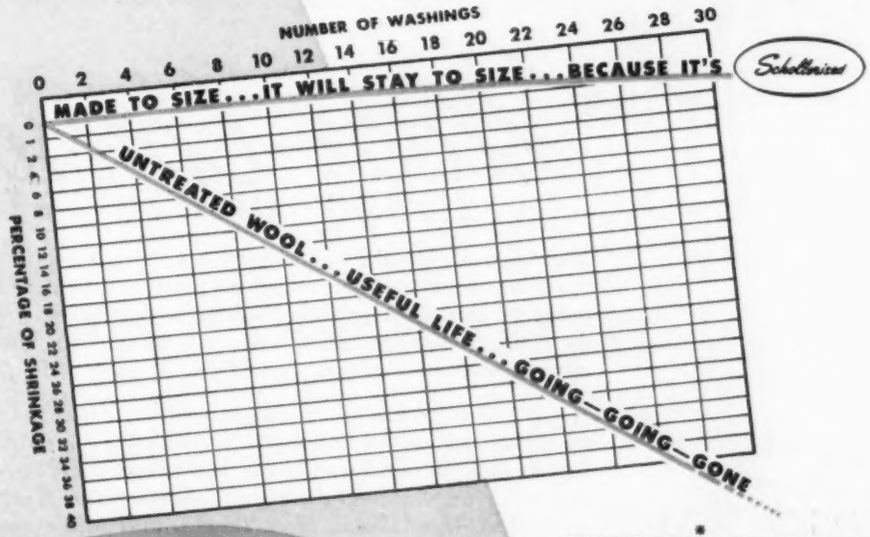
This "Invisible Trademark" Stands Back of the Trademarks of the World's Finest Woven Fabrics.

LIFE ASSURANCE

for your wool product!

HERE'S A GRAPHIC "LIFE HISTORY" THAT TELLS A VITAL STORY...

Because SCHOLLERIZING is so *practical* — so consistently *uniform* in results . . . so comparatively *simple to apply*, more and more alert wool-products manufacturers are deciding upon the Scholler process for wool shrinkage control!


NUMBER OF WASHINGS
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
Schollerized
MADE TO SIZE...IT WILL STAY TO SIZE...BECAUSE IT'S
UNTREATED WOOL...USEFUL LIFE...GOING—GOING—GONE
PERCENTAGE OF SHRINKAGE

No elaborate, costly or specialized mechanization set-ups are required for application of the Scholler Wool-Shrinkage Control Process. The simplicity is amazing. Once inaugurated in a plant, no greater labor skill than is now already available, is necessary. No critical point is reached during application of the process that might cause damage to the fibre or affect the efficiency of shrinkage control.

* SCHOLLERIZING will not change the weight, "feel" or hand, and texture of the wool nor does it affect its natural resiliency, elasticity or appearance. Strength of the yarn is generally the same or greater than the original. Extremely flexible in application, wool may be Schollerized in the raw stock, tops, skeins, packages or fabric.

* U. S. and Foreign Patents Pending

made to size...it will stay to size...because it's

Schollerized
WASHABLE WOOL
SAFE TO TUB • SAFE TO RUB

Write Today For Full Details On The Amazing Scholler Wool Shrinkage-Control Process applied to YOUR product!

SCHOLLER BROTHERS, INC.

Manufacturers of Scouring, Dyeing and Finishing Materials

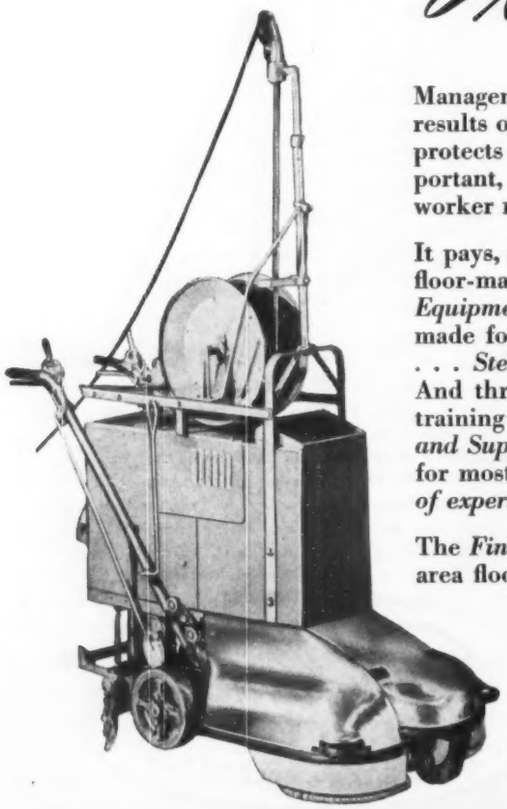
COLLINS at WESTMORELAND, PHILADELPHIA 34, PA.

IN CANADA: SCHOLLER BROTHERS, LTD., ST. CATHARINES, ONTARIO

SERVING THE TEXTILE INDUSTRY FOR MORE THAN FORTY YEARS

WHY YOU SHOULD BE . . .

Floor-Conscious



Management should be *floor-conscious* to prevent *floor-neglect.* The results of neglected floors can be costly. Adequate floor care not only protects management's investment in the flooring itself but, more important, aids safety underfoot . . . reduces fire hazards . . . bolsters worker morale . . . aids production. It *pays* to be *floor-conscious.*

It pays, also, to choose a system of floor care that affords an *over-all* floor-maintenance economy! *Finnell* offers such a system, including *Equipment* that exactly fits the individual need . . . *Cleansers* specially made for machine-scrubbing . . . *Sealers* and *Waxes* in specific types . . . *Steel-Wool Pads, Mop Trucks,* and other accessory equipment. And through its nation-wide staff of *Specialists, Finnell* provides for training maintenance operators in the proper use of *Finnell Equipment and Supplies* . . . and for recommending cleaning schedules, et cetera, for most effectual care. These *Specialists* share *Finnell's four decades of experience.*

The *Finnell Self-Propelled Scrubber-Vacuum* at left, for use on large-area floors, applies the cleanser, scrubs, rinses if required, and picks up. Cleans up to 8,750 sq. ft. per hour!

For consultation or literature, phone or write nearest *Finnell Branch* or Finnell System, Inc., 1306 East Street, Elkhart, Indiana. Branch Offices in all principal cities of the United States and Canada.

Everything FINNELL for Floor Care

FINNELL SYSTEM, INC.

Pioneers and Specialists in

FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

BRANCHES IN ALL PRINCIPAL CITIES

Houghton's newest wetting and rewetting agent is

HIGHLY CONCENTRATED...

HIGHLY EFFICIENT...

Here are the brief facts about the new SURFAX 1288, proven in textile mills to be an excellent money value for a wide range of wet processing operations:

Surfax 1288, an exclusive Houghton development, is an anionic type of surface active agent, water soluble at all working proportions. It is a liquid, reddish-amber in color.

This product has already been proven for such operations as preparation for compressive shrinkage; dyeing of hosiery; package, jig or pad dyeing, etc.

Use Surfax 1288 in neutral, mild acid or mild alkaline solutions. Use it in hard water. Use it for leveling dyebaths because of its excellent dispersing and retarding properties.

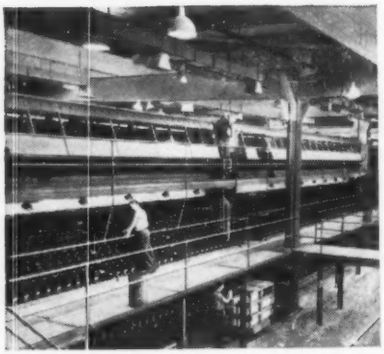
And use *less* of it, because it's concentrated and highly effective. Write for Product Data Sheet and trial quantity to match against any other such agents you may have used.

ESTABLISHED 1865

E. F. HOUGHTON & CO.

303 W. Lehigh Ave., Phila. 33, Pa.
825 W. Morehead St., Charlotte, N. C.

It's Carrier for scientific air conditioning



In the chemical production of fibers, too, Carrier control of temperature and humidity is vital to large-scale production and uniform quality. Here in the world's first plant for continuous processing of viscose rayon at Paynesville, Ohio, the Industrial Rayon Corporation operates more than a mile of streamlined spinning machines like this.

Call it what you like — scientific air conditioning or air conditioning know-how — Carrier has what it takes to design and install the system which will reduce your costs the most.

Proof that Carrier know-how pays off is on record. Here are just two of many case histories from Carrier files:

1 **Before modernizing its outmoded air conditioning with a new Carrier Evaporative Cooling System, mill A's production was limited to 32,000 yards of cloth per loom. After Carrier modernization, loom efficiency increased 2 per cent — giving the mill 640 more yards of cloth per loom with exactly the same labor.**

2 **Before the addition of Carrier Refrigeration eliminated the sudden temperature changes in mill B, ends-down averaged 50 to 60 per 1000 spindle hours — afterward they were cut in half. Lower temperatures made labor more efficient. More efficient labor gave better attention to fewer ends-down.**

These are typical examples of the easily measurable results of scientific air conditioning. There are other results not so easy to measure, but which are very important — for instance, better choice of labor, less employee absenteeism and turnover.

Whether your problem involves a new installation or modernizing an old system, you can rely on Carrier know-how for a sound solution. Carrier Corporation, Syracuse, New York.

Carrier AIR CONDITIONING • REFRIGERATION • INDUSTRIAL HEATING

Coprantine Colors

The way to better

WASH AND LIGHT FASTNESS
ON
VISCOSE RAYON, AND COTTON,
WOOL BLENDS AND ACETATE BLENDS
IN
YARNS, HOSIERY, KNIT GOODS AND WOVEN FABRICS

These colors . . .

are a new class of substantive dyestuffs. They give by the usual direct color procedure, dyeings which when aftertreated, combine with copper salts to form exceedingly stable complex compounds of excellent fastness to both light and washing.

DYESTUFFS · CHEMICALS · INTERMEDIATES

CIBA

COMPANY, INC.

Greenwich & Morton Sts.
NEW YORK

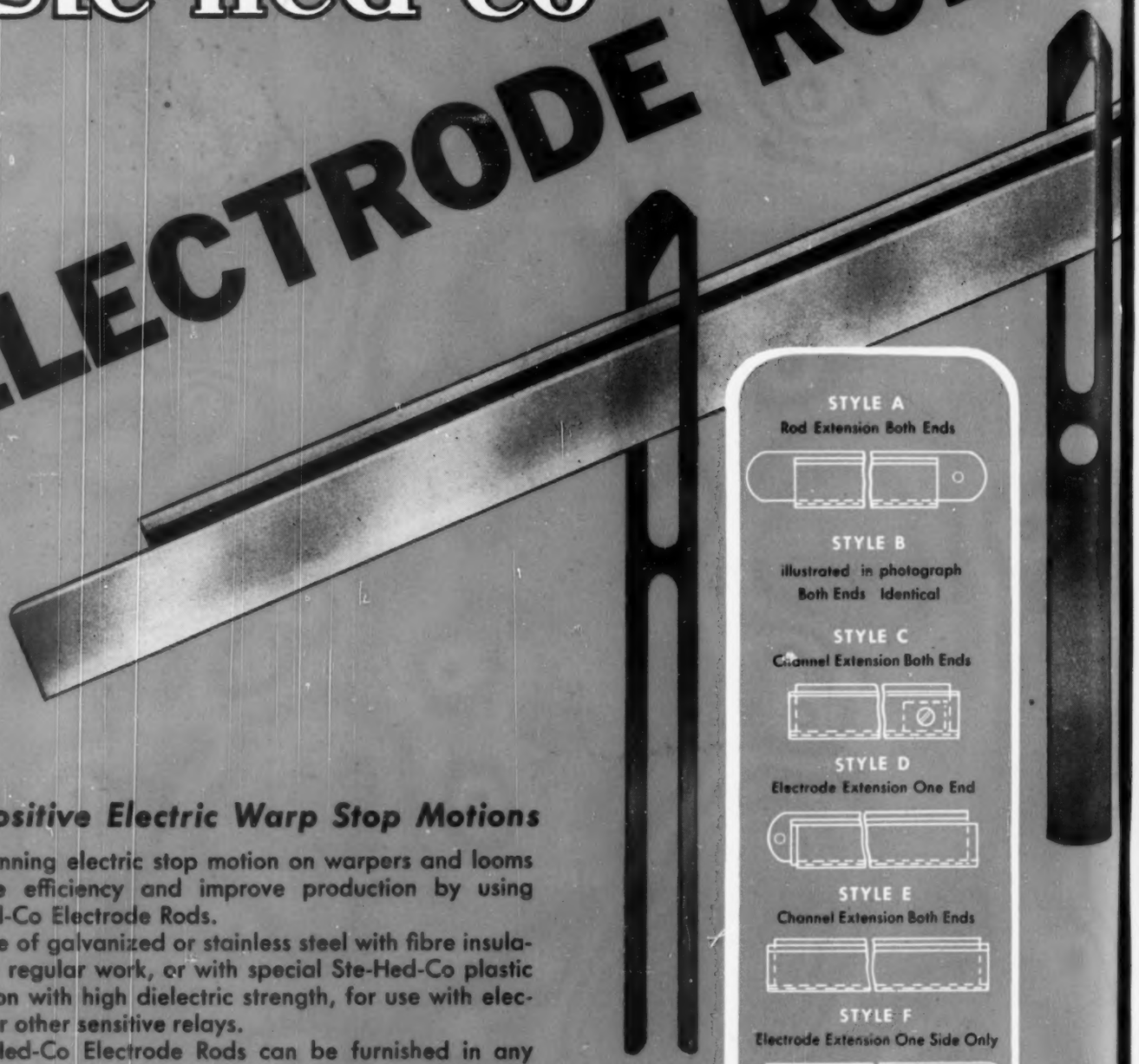
BOSTON CHICAGO CHARLOTTE
PROVIDENCE SAN FRANCISCO PHILADELPHIA

VAT DYES OF THE DOW CHEMICAL CO

ESPECIALLY RECOMMENDED FOR PACKAGE MACHINE DYEING

Ste-hed-co

ELECTRODE RODS!



STYLE A
Rod Extension Both Ends

STYLE B
illustrated in photograph
Both Ends Identical

STYLE C
Channel Extension Both Ends

STYLE D
Electrode Extension One End

STYLE E
Channel Extension Both Ends

STYLE F
Electrode Extension One Side Only

For Positive Electric Warp Stop Motions

Mills running electric stop motion on warpers and looms increase efficiency and improve production by using Ste-Hed-Co Electrode Rods.

Made of galvanized or stainless steel with fibre insulation for regular work, or with special Ste-Hed-Co plastic insulation with high dielectric strength, for use with electronic or other sensitive relays.

Ste-Hed-Co Electrode Rods can be furnished in any length and style, and delivery will be prompt on all orders.

Ste-Hed-Co Drop Wires made in weights for all sizes of warp yarn in galvanized, copper, nickel finish and stainless steel.

MANUFACTURERS OF —

Flat Steel Heddles
Loom Harness Frames
Loom Reeds
(Pitch Band and All Metal, Regular and Stainless Steel Wire)
Warp Preparation Equipment
Loom Harness Accessories
Electrode Rods
(Fibre and Plastic Insulation)
Southern Shuttles
(Tempered Dogwood, Persimmon and Fibre Covered)

STEEL HEDDLE MFG. CO.

2100 W. Allegheny Ave., Philadelphia 32, Pa.

SOUTHERN SHUTTLES DIVISION 621 E McBee Ave. Greenville S.C. and Paris S.C.

Atlanta Ga. • Greensboro N.C. • Providence, R.I. • Montreal, Can.

tests like this

To assure uniform brilliancy, a Westinghouse worker in the Fairmont, W. Va. plant gives "Easter egg" test to 100-watt fluorescent lamp. The brilliant radiation of this industrial lamp is measured through a tiny hole in sphere's side by an electric eye.

make Westinghouse Fluorescent Lamps

WORK SO WELL · BURN SO BRIGHT · LAST SO LONG

YOU CAN BE **SURE**...IF IT'S

Westinghouse Lamps

THE NAME YOU KNOW IN

Don't "SPARE THE WIND AND SPOIL THE TWIST"

Successful ply yarn manufacture is the result of many factors, not the least of which is efficient doubling. Foster Model 57 Doublers fit right into the better twisting picture. They combine every possible feature that has been shown desirable in preparing yarns for twisting.

Foster Model 57 can be set up for one process doubling, drawing direct from bobbins. For this operation it is equipped with a tension and slub catching device for automatic inspection and uniform tension on multiple ends. Model 57 can also be equipped for the two process system, drawing from cones which have been wound and inspected on the Foster Model 102.

Exceptionally high speeds are possible without loss of quality. Machine can be equipped to wind 6" or 7" traverse tubes.

Take advantage of this company's more than 50 years of experience in designing and building yarn winding and doubling equipment. Investigate the Foster Model 57 Doubler. Write for Circular A-90.

BETTER *TWIST* BY DOUBLING ON

FOSTER *Model* 57

Additional features of Model 57:

NO SHARP BENDS IN THREAD LINE
Minimum yarn strain

NO JUMPING OFF DOUBLING ROLL
Threading guard on roll

QUICK ACTING STOP MOTION
Enough yarn left for single end piecing

INDIVIDUAL SLUB CATCHER SETTINGS, IF DESIRED
Permits doubling of coarse and fine yarns side by side

FOSTER MACHINE CO.
WESTFIELD, MASS.

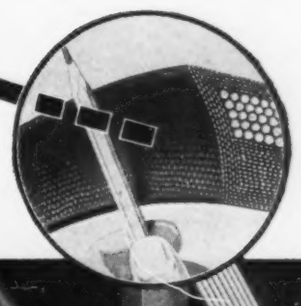
Southern Office: Johnston Bldg., Charlotte, N. C. • Canadian Representative: Ross, Whitehead & Company Limited, University Tower Building, 660 Ste. Catherine Street West, Montreal • European Representative: Muschamp Taylor Limited, Manchester, England

This Simple Test
Shows Exactly How

The CONCAVE SIDE...

(U.S. Patent No. 1813698)

Saves You Money!



Pick up *any* V-belt having the ordinary straight sides and *bend* the belt. Three things will happen, right before your eyes.

(1) The top of the belt is under tension and grows *narrower.* (2) The body, under compression, becomes wider. (3) The sides of the belt *bulge out.* (Figures 1 and 1-A, below.)

Straight-Sided V-Belt

How Straight-Sided V-Belt Bulges in Sheave-Groove

This bulging of the straight-sided V-belt in its sheave-groove costs you money in *two* ways—(1) The bulge causes uneven sidewall wear—*shorter life!* (2) The bulging side cannot evenly grip the wall of the sheave groove—a loss in *transmission efficiency!*

In figures 2 and 2-A, you see how the precisely engineered *concave* side of the Gates Vulco Rope exactly corrects this bulging.

Gates Vulco Rope with Concave Side.

No Side Bulge. Precise Fit in Sheave-Groove.

Two distinct *savings* result. (1) The Gates Vulco Rope wears evenly—*longer life!* (2) The entire side-wall grips the pulley—carries heavier loads and *sudden load increases* without slippage:—saves *belts* and also *saves power!*

The Mark of SPECIALIZED Research

The Concave Side is *MORE IMPORTANT NOW* Than Ever Before

Because the sides of a V-Belt are what actually drive the pulley, it is clear that any increased load on the belt means a heavier load that must be transmitted to the pulley directly through the belt's sidewalls.

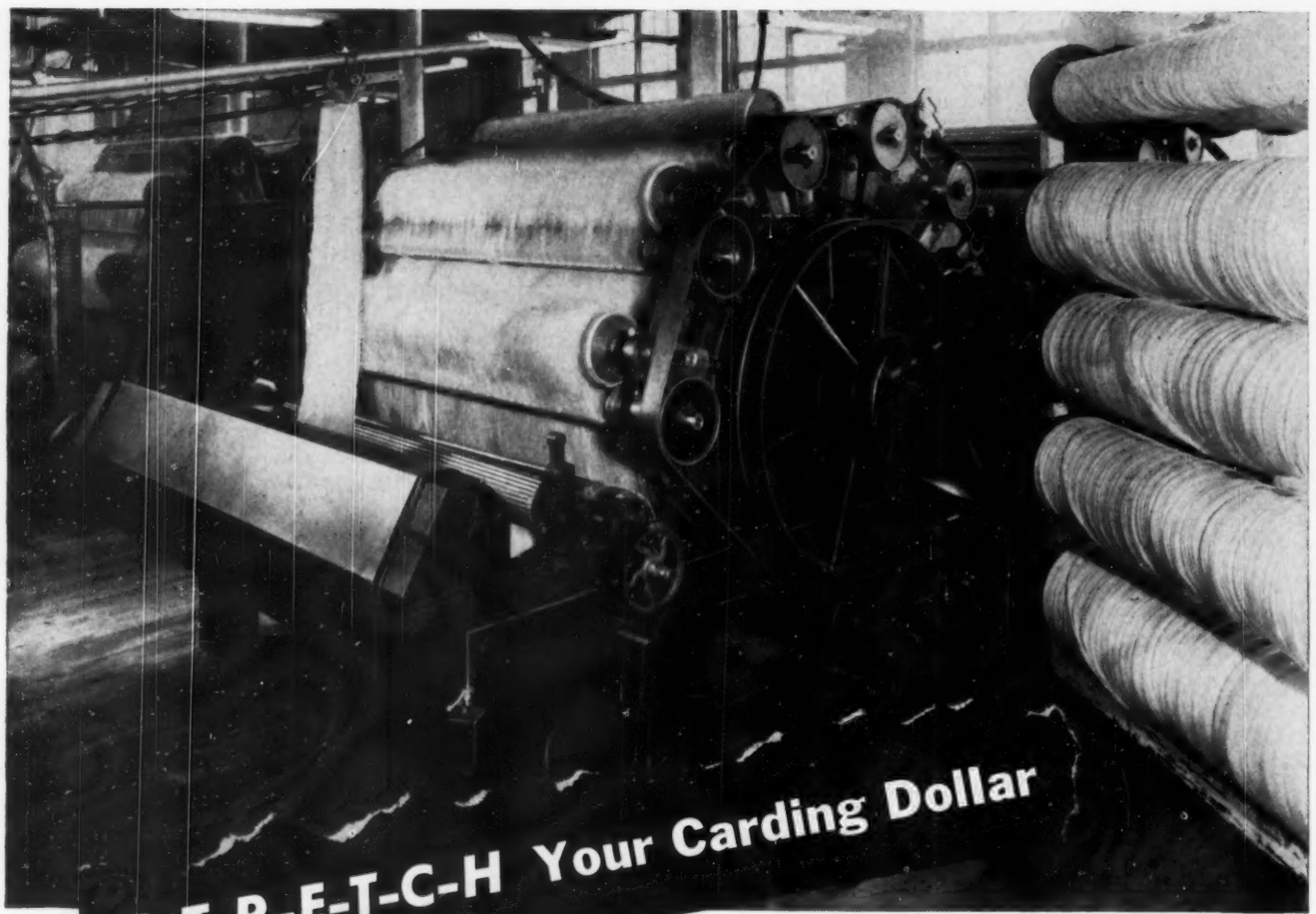
Now that Gates *SPECIALIZED* Research has made available to you SUPER Vulco Ropes—carrying fully 40% higher horsepower ratings—the life-prolonging Concave Side is naturally more important in conserving belt life today than ever before.

496

GATES VULCO ROPE DRIVES

IN ALL INDUSTRIAL CENTERS

THE GATES RUBBER COMPANY
DENVER, U.S.A.
The World's Largest Makers of V-Belts



—with TUFFER Card Clothing

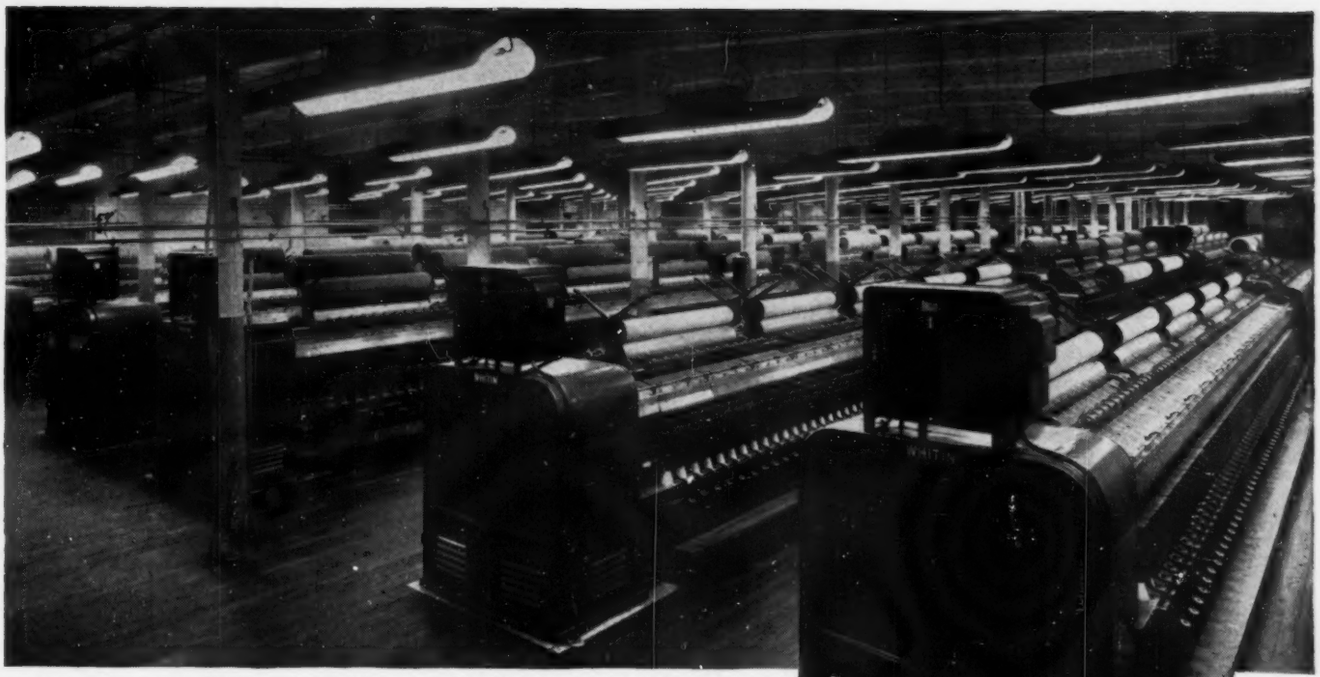
You have a substantial investment in card room machinery and equipment. Yet the condition of your card clothing vitally affects the return on your investment—because *the card clothing still does the carding.*

Ask a Tuffer man to inspect your card clothing. He is qualified to make recommendations that will return the maximum for your equipment and payroll dollar.

HOWARD BROS. MFG. CO.
WORCESTER 8, MASSACHUSETTS
Southern Plants: Atlanta, Ga. and Gastonia, N. C **Branches:** Philadelphia, Pa. and Blanco, Texas
Direct Representation in Canada A-4

TUFFER CARD CLOTHING

IMPROVES PRODUCTION ALL ALONG THE LINE



A modern mill installation of new Whitin Model "E" Wool Spinning Frames.

WHITIN Wool Spinning Frames

Pay Big Dividends

Not for 1 Year - Not for 2 Years

. . . but YEAR AFTER YEAR

Many dividends to be derived from an installation of Whitin Model "E" large package wool spinning frames are obvious and accepted. Production is greater; yarn quality is better, with greater evenness and strength, bringing related savings in subsequent operations. These benefits are well known.

There is another dividend — an important one, too — which is often overlooked. It is the *long life*-and *low maintenance cost* of Whitin installations. We feel that an important customer of ours has covered this very well in a recent letter describing a modernization program he recently completed involving the moving of a number of our frames. We are permitted to quote as follows:

"They, of course, had to be completely dismantled with the exception of the heads, and re-erected. Now it should be pointed out that these frames had been running about four years on a three-shift, 7 days a week operation, namely 168 hours, which is the equivalent of approximately 17 years on a single shift, 40 hour basis.

To our complete surprise, not a single bearing, shaft, gear or roll had been impaired in the slightest. We even went so far as to examine the bottom bearings on the spindles and bolsters themselves. The frames had been operating on high twist yarn with a spindle speed of approximately 4900 turns per minute. After a continuous run of four years, with no shutdown whatsoever, we thought the condition of the machines was remarkable."

This is not an isolated case. Mill after mill has collected comparable dividends.

Write Today for descriptive literature on Whitin Model "E" Wool Spinning Frames

Whitin MACHINE WORKS

WHITINSVILLE, MASSACHUSETTS

CHARLOTTE, N. C. • ATLANTA, GA.

A Tip to Progressive Mill Operators

HYATT

ROLLER BEARINGS

As contrasted with constant plain bearing loom oilings, records show that with Hyatt Roller Bearing equipped looms, lubricating time is cut down to a few times a year. When ordering looms specify Hyatts. Let us tell you more.

HYATT BEARINGS DIVISION · GENERAL MOTORS CORPORATION · Harrison, New Jersey

Cut COSTS!

SPECIFY THE DETERGENT WITH GUARANTEED

40% active organic content

Nacconol NR

AMERICA'S LEADING SYNTHETIC DETERGENT

WASHES · WETS · DISPERSES · FOAMS · EMULSIFIES

IN HOT OR COLD SOLUTIONS AT ANY pH

COSTS LESS · DOES MORE

NATIONAL ANILINE DIVISION ALLIED CHEMICAL & DYE CORPORATION

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Reg. U. S. Pat. Off.

Recent Advances

in the technology of industrial chemicals, synthetic rubber, plastics, dyes, soaps, high octane gasoline, pharmaceuticals, paper and textiles have been paralleled by equally important developments in the field of Stainless Steel.

THE versatility of this superior corrosion-resisting and heat-resisting steel group has in recent years been constantly extended so that it is generally safe to say:—*the more severe the service the greater the need for Stainless Steel.*

In U·S·S Stainless Steel we offer perfected, service-tested Chromium and Chromium-Nickel Stainless Steels, not only in different analyses but in the most complete range of forms, sizes and surface finishes available anywhere.

Our engineers, who are specialists in the use of stainless steels, have behind them the research and laboratory facilities of the world's largest producer of fine steels. These facilities are available to tackle your problems where they involve severe or unusual applications.

AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO · CARNEGIE-ILLINOIS STEEL CORPORATION, PITTSBURGH & CHICAGO
COLUMBIA STEEL COMPANY, SAN FRANCISCO · NATIONAL TUBE COMPANY, PITTSBURGH · TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM
UNITED STATES STEEL SUPPLY COMPANY, WAREHOUSE DISTRIBUTORS, COAST-TO-COAST · UNITED STATES STEEL EXPORT COMPANY, NEW YORK

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U·S·S STAINLESS STEEL

SHEETS · STRIP · PLATES · BARS · BILLETS · PIPE · TUBES · WIRE · SPECIAL SECTIONS

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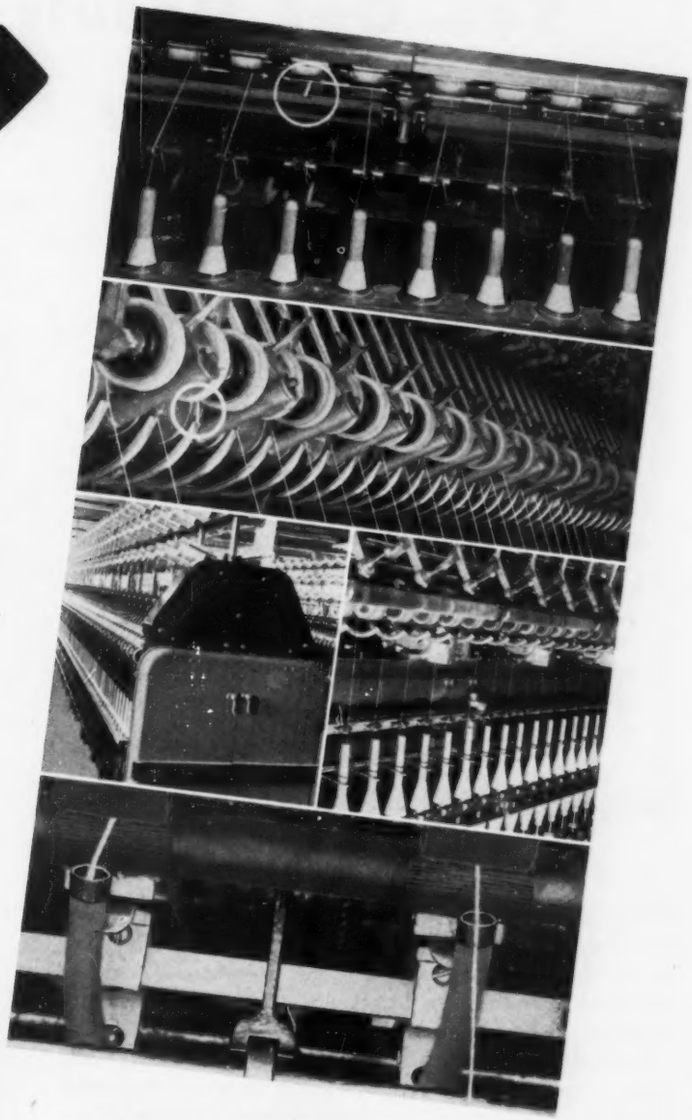
UNITED STATES STEEL

Put Your Mill in Top Competitive Position With . . .

PNEUMAFIL ★



Spinning without Pneumafil in these competitive days, when quality and price are all-important, is obsolete.

Complete Information on Request

★ Registered Trademark

South America and Continental Europe:
Luwa, S. A., Zurich, Switzerland

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P. O. Box 54, London, Canada

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Improves Quality

Yarns of quality get the order and bring higher prices. Pneumafil eliminates spinning doublings and "wild" or flying ends; greatly reduces slubs, gouts, and end piecings; and improves end piecings.

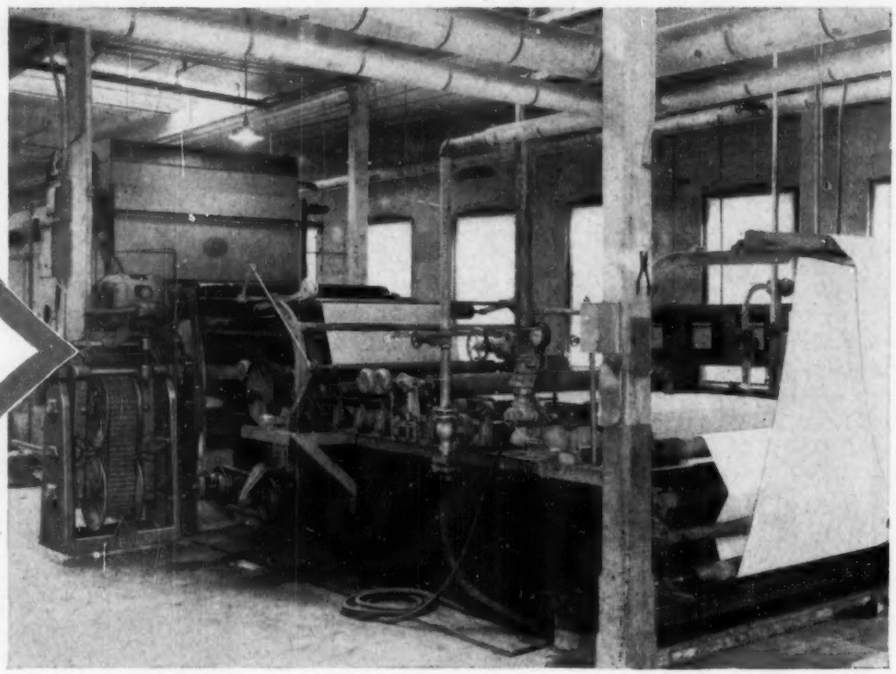
Reduces Costs, Increases Production

Less frame stoppage, higher frame speeds, fewer ends down, better running work, and more productive spindles, give Pneumafil equipped frames a great competitive advantage. Decreased spinning, cleaning, and sweeping labor; reduced training time; and improved and controlled waste salvage reduce overhead costs.

Pneumafil Corporation • Charlotte • Boston

You Get Results—Right Now! with Reeves Speed Control!

This Carbonizing Range, built by James Hunter Machine Co., North Adams, Mass., employs a No. 3 REEVES Variable Speed Transmission of vertical, open design, with motor base and electric remote control. In processing woolens and worsteds, the REEVES unit delivers instant, accurate speed variations so that a wide range of materials may be passed through the same machine—from 8-ounce women's wear to 32-ounce overcoating.



When REEVES Speed Control is applied to machines for the preparation, fabrication, spinning, twisting or finishing of yarn or cloth, results—in the form of increased production, improved, uniform quality and reduced cost—are *immediate!*

Providing infinite, accurate speed adjustability—the *right* speed for every operation and every operator under every changing condition—REEVES Speed Control is available in a *complete* line of rugged, easy-to-maintain units adaptable to all types of textile mill machines.

REEVES TRANSMISSION meets the demand for heavy-duty service, higher horsepower output, wide speed range, automatic control. REEVES MOTOR PULLEY serves installations where economy, limited speed range, ease of installation, low horsepower output are the principal factors. REEVES MOTODRIVE is ideal for installations where space is limited, and where low output speeds are indicated.

To assure increased output, improved quality and reduced manufacturing cost in your mill, install REEVES Speed Control on machines now in service—insist on it for the new machines you plan to buy. A REEVES field engineer familiar with textile applications will be glad to help you make the correct choice of REEVES units, without obligation. Write for his name—also for the complete REEVES Catalog W13-450A.

REEVES PULLEY COMPANY • COLUMBUS, INDIANA

Recognized Leader in the Specialized Field of Speed Control Engineering

ACCURATE • VARIABLE

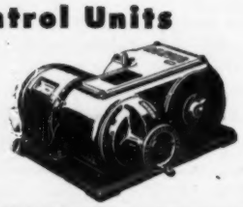
Reeves Speed Control

GIVES THE RIGHT SPEED FOR EVERY JOB!

The Three Basic Reeves Speed Control Units

VARIABLE SPEED TRANSMISSION for providing infinite, accurate speed flexibility over a wide range—2:1 to 16:1. Sizes—fractional to 87 hp.

VARI-SPEED MOTOR PULLEY provides an instantly variable speed drive within 4:1 ratio for any constant speed motor. Sizes to 10 hp.



MOTODRIVE combines motor, speed varying mechanism and reduction gears in single unit. Speed variations 2:1 to 6:1 inclusive. Sizes to 20 hp.

They're both right! For today, most textilemen know that the use of a soap or a synthetic in wet processing operations depends on the nature of the operation, the properties of the fiber, etc. Some operations call for high wetting and penetrating action—others for high detergency or emulsifying power. That's why certain textile processes call for soaps, others for synthetics . . . and Armour makes the best of both. For instance . . .

You need a soap—

In fulling wool—a soap with good lubricant properties like Armour's FLINT CHIPS.

In finishing cottons—a low titered soap, free from rancidity like Armour's CERTIFIED or TEXSCOUR.

In finishing synthetics—a high purity soap, free from rancidity like Armour's FLINT CHIPS, CERTIFIED or TEXSCOUR.

You need a synthetic—

In dyeing cottons and wool—a synthetic that has stability to acid and dye-suspending action like Armour's REGAL or ENERGETIC.

In scouring water repellent or resin treated fabrics—a synthetic with good detergent action like Armour's TRIUMPH or REGAL.

In desizing cottons—a synthetic with rapid penetration and wetting action like REGAL.

You can use either a soap or synthetic—

In kierboiling cottons—and in boil-off—a soap or synthetic with rapid penetration and/or soil removing and suspending action like CERTIFIED or FLINT CHIPS—REGAL or ENERGETIC DETERGENTS.

In scouring raw wool—a soap or synthetic with good detergent properties, easy solubility and rinsability like RE-NU and TEXSCOUR or TRIUMPH and REGAL DETERGENTS.

Armour has a quality soap—a quality synthetic for your every textile use.

ARMOUR *Industrial Soap Division*

Armour and Co., 1355 W. 31st St., Chicago 9, Ill.

WRITE TODAY!

Please send me Armour's handy reference chart to help in selecting the right soap or synthetic for each textile processing operation.

Name.....*Title*.....

Firm.....

Firm Address.....

City.....*Zone*.... *State*.....

TEXTILE BANKING COMPANY

Inc.

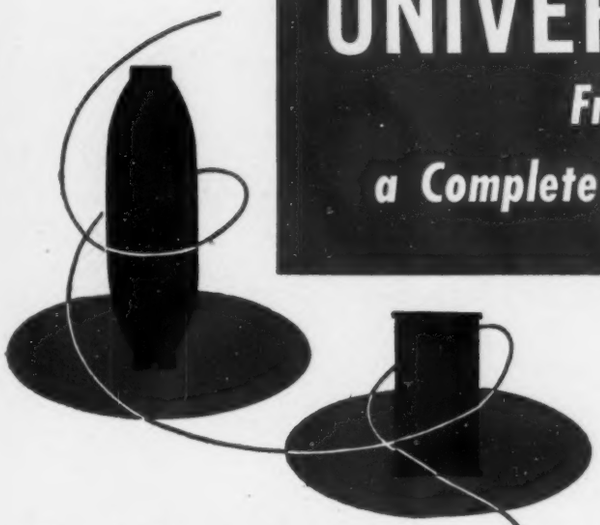
Factoring Service

Puts your sales on a cash basis
Strengthens your cash position
Relieves you of credit losses

55 MADISON AVENUE • NEW YORK

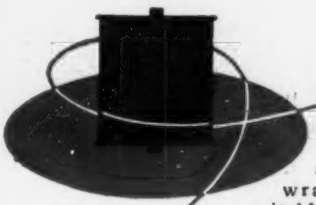
UNIVERSAL-ATWOOD

From pirn to cone — a Complete System for Throwing Nylon

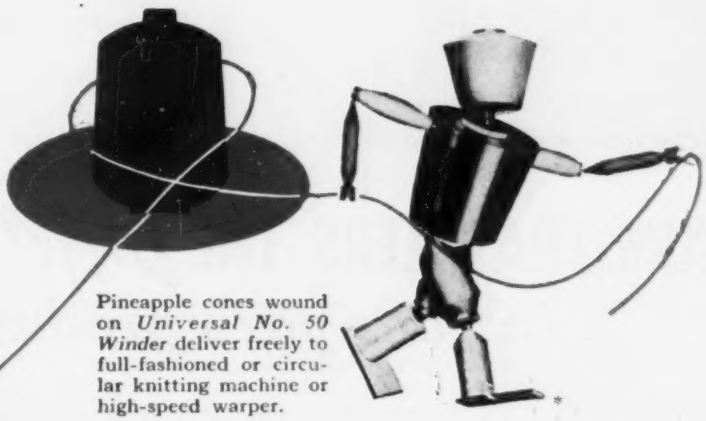


Pirns of nylon yarn are rewound at high speed on *Atwood Model 200 Redraw* onto spools of proper density and wind, which insure highest efficiency when used as supply for up-twisting.

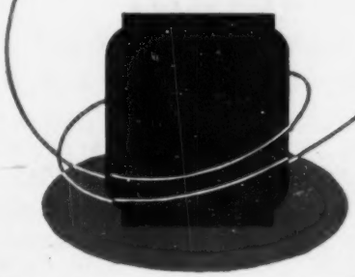
From the time nylon yarn enters a throwing plant until it leaves . . . it can be processed on machinery *all* built to a single standard of manufacturing quality. Only Universal, with its Atwood Division, builds a complete line of throwing equipment.



Bobbins of uniform twist and accurate number of wraps, providing a suitable delivery for the sizing machine, are produced by *Atwood Up-Twisters.*



Pineapple cones wound on *Universal No. 50 Winder* deliver freely to full-fashioned or circular knitting machine or high-speed warper.



Tubes sized single end on *Universal No. 250B* Sizing Machine are built with a special traversing arrangement which, by alternately lengthening and shortening the yarn layers, forms tapered selvedges for free delivery to the next operation.

LEESONA

UNIVERSAL WINDING COMPANY

P. O. BOX 1605 • PROVIDENCE 1, R. I.

Boston, Philadelphia, Utica, Charlotte, Atlanta, Chicago, Los Angeles; Montreal, Hamilton, Canada; Manchester, England; Paris, France; Basle, Switzerland. *Agents in every principal textile center throughout the world.*

*REG. U. S. PAT. OFF.

UNIVERSAL-ATWOOD NYLON TWISTING, SIZING AND CONING

used by more throwsters than any other method.

The two large bronze travelers illustrated actual size each weigh 600 grains and are used for twisting sash cord and heavy twine. No. 12 and No. 16 bronze twister travelers are shown for comparison. These "heavy weights" are the biggest in Victor's line of some 15,000 sizes and styles for every spinning and twisting need.

ARE TRAVELERS THE *Biggest* THINGS *in your yarn production setup?*

ACTUALLY, they are about the smallest piece of equipment you use in fiber processing. But they *can* be one of the biggest, in point of time and production lost, if you choose the wrong traveler. A little traveler can become your biggest headache.

With the new interest in worsted yarns prepared on the cotton system, and with so many new synthetics and blends coming up for processing, it is more difficult today than ever to be sure the traveler you use is right for the job. Experience with conventional fibers helps. But, to save precious time in setting up smooth-running spinning and twisting, you need up-to-the-minute information.

You can get that kind of information from a man whose job it is to keep abreast of every new development. The Victor Service Engineer is fully prepared to help you keep out of traveler trouble, and, more than that, help you raise production and quality, often well above what you expected.

Make sure you are getting the most and the best from your frames, whether you are running blends, straight synthetics, or conventional fibers. Write, wire or phone, and a Victor Service Engineer will call promptly.

★

Keep a Step ahead with

VICTOR Ring Travelers

VICTOR RING TRAVELER COMPANY

PROVIDENCE, R. I. . . . . 20 Mathewson St. . . . . Tel. Dexter 0737

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"PACKAGED POWER"

That's Shockless—Trouble-Free!

LINK-BELT *Electrofluid* GEAR DRIVES WITH SILVERLINK ROLLER CHAIN

The Ideal Slow Speed Drive

The advantages of the Electrofluid Drive are available on virtually any power application through combination with other Link-Belt enclosed gear and chain drives. Above is shown one such combination which will afford shock-proof, economical power transmission at low speed.

Three principal advantages of this drive are:

(a) It provides smooth power transmission, assuming the load gradually and eliminating shocks which could damage material in process.

(b) It prevents damage to costly power-driven equipment and eliminates work stoppages.

(c) It permits the use of a smaller motor than ordinarily required to handle starting loads—improves power factor and overall efficiency.

Ask for Book No. 2085-A giving full details and application suggestions.

TYPES OF LINK-BELT Power Transmission Machinery

- Silverlink Roller Chain
- Silverstreak Silent Chain
- Steel and Malleable Chain
- Worm Gear Drives
- Herringbone Gear Drives
- Helical Gear Drives
- Gearmotors
- P.I.V. Variable Drives
- Fluid Drives
- V-Belt Drives
- Ball Bearings
- Roller Bearings
- Babbitted Bearings
- Couplings, Clutches, Collars, etc.

LINK-BELT COMPANY Chicago 9, Indianapolis 6, Philadelphia 40, Atlanta, Dallas 1, Minneapolis 5, San Francisco 24, Los Angeles 33, Seattle 4, Toronto 8. Offices, Factory Branch Stores and Distributors in Principal Cities. 11.227

LINK-BELT

Power Transmission Machinery

"THE COMPLETE LINE"

Shown here is one view in the spotless modern plant where Swift's Animal Protein Colloid is made. Operation is continuous, automatic... the product is "untouched by human hands," not contaminated by foreign substances.

Investigate this Modern Process Agent:

Swift's Animal Protein Colloid*

(made from an exclusive Swift Process)

Does your manufacturing process require . . .

1. An emulsifier?
2. A flotation agent?
3. A gel structure?
4. A settling agent?
5. A protective coating?
6. A sizing agent?
7. A carrier of pigments?
8. An impregnating agent?
9. A base for pigment?
10. An oilproofing agent?
11. A flocculating agent?
12. A clarifying agent?
13. A filtering agent?
14. A stiffening agent?
15. A mordant?

This modern process agent, Swift's refined Animal Protein Colloid, has properties which may be employed in a wide number of processes. Even though you have used other processing agents, be sure you investigate Swift's Animal Protein Colloid now. It has unusual properties. It may meet the requirements of your present operations or help in developing new ones.

What is this modern process agent?

Swift's Animal Protein Colloid is made by an exclusive Swift process. Protein liquor is extracted from bones and highly concentrated. This pure liquid falls on a bed of dry finished product which adheres evenly to the droplets. Then, by continuous and automatic schedule, these droplets travel through driers and are milled and screened. This whole operation is under *precise synchronized control* and is completed in relatively short time.

The result is a uniform granular form that goes into solution rapidly. It's a purified product, light amber in color.

Because plant and machinery are kept spotlessly clean — the finished product does not touch material which can contaminate it with foreign substances... because of the precise control possible with Swift's exclusive process, Swift can bring you this *superior* processing agent. And Swift's Animal Protein Colloid has the same high quality and uniform characteristics the year 'round.

Swift's technical service yours, investigate now

Write or phone for one of Swift's special representatives. He will call and discuss Swift's Animal Protein Colloid with you. This process agent may be just what you are looking for. Write to:

Swift & Company

ADHESIVE PRODUCTS DEPARTMENT

4125 Packers Avenue, Chicago 9, Illinois

*Commercially high quality bone glue.

Rapidogens® for printing

fast colors on cotton, rayon and linen

brilliant colors outstanding for clarity and depth.

extensive color range many important shades are exclusively GDC.

fastness excellent fastness to washing—very good fastness to light.

powders and solutions both forms are available.

application develop rapidly in acid ageing—many can be developed in neutral ageing.

versatility can be printed alongside Indanthrenes and Algosols.

economy combine quality with ease of application.

GDC **GENERAL DYESTUFF CORPORATION**

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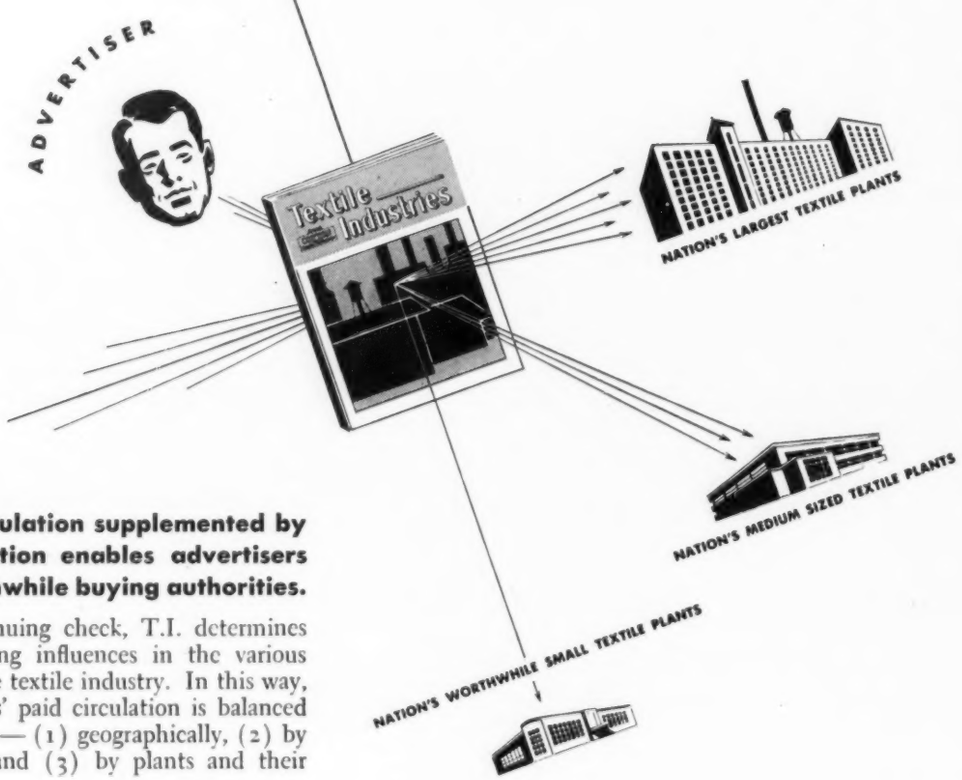
THE MOST EFFECTIVE METHOD OF

thoroughly covering

TEXTILE MILL BUYING UNITS



T.I.s big paid circulation supplemented by Directed Distribution enables advertisers to reach all worthwhile buying authorities.

Through a continuing check, T.I. determines the important buying influences in the various mills throughout the textile industry. In this way, TEXTILE INDUSTRIES' paid circulation is balanced as closely as possible — (1) geographically, (2) by industry divisions, and (3) by plants and their *buying units*.

Result: TEXTILE INDUSTRIES' paid circulation among production and management men *actually in the mills*, is the largest domestic mill circulation of ANY textile publication.

In any field, however, the most perfect paid circulation is bound to leave important gaps in the market coverage — top executives who cannot be reached by subscription salesmen, inaccessible department heads, others. T.I. closes these gaps with Directed Distribution.

The fact that the Directed Distribution required to complete the coverage of the industry's important buying influences is less than 10% of the paid circulation, is a tribute to the wide interest in TEXTILE INDUSTRIES and to the high quality of its paid subscribers.

Advertisers agree this is the most sensible plan known for *completely covering* mill buying units. T.I. advertisers' results confirm it.

Textile Industries

The Production and Management Journal of the Textile Industries

806 PEACHTREE ST., N.E. • ATLANTA 5, GA.

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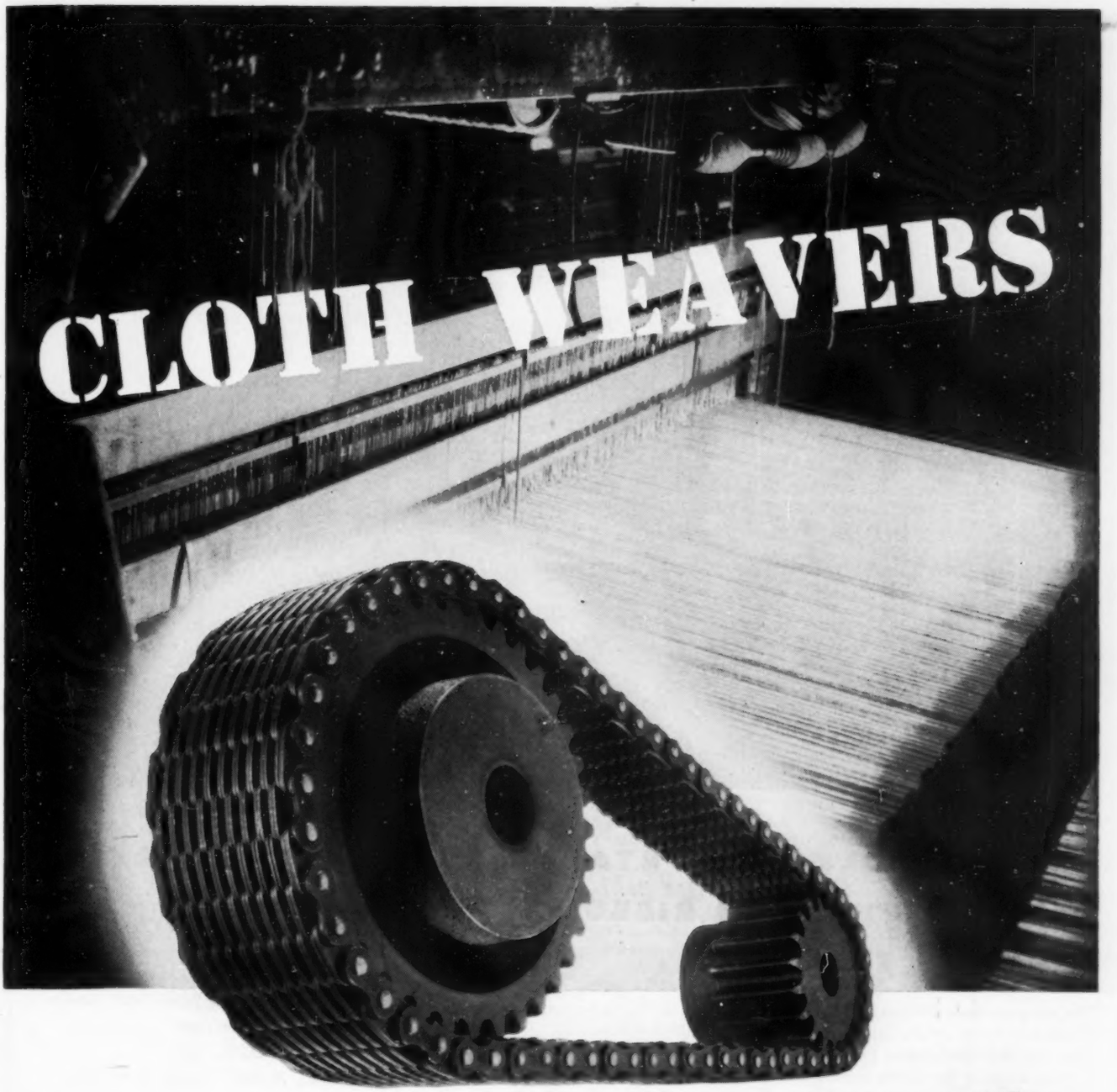


MAINTAIN PRODUCT UNIFORMITY WITH POSITIVE DRIVE

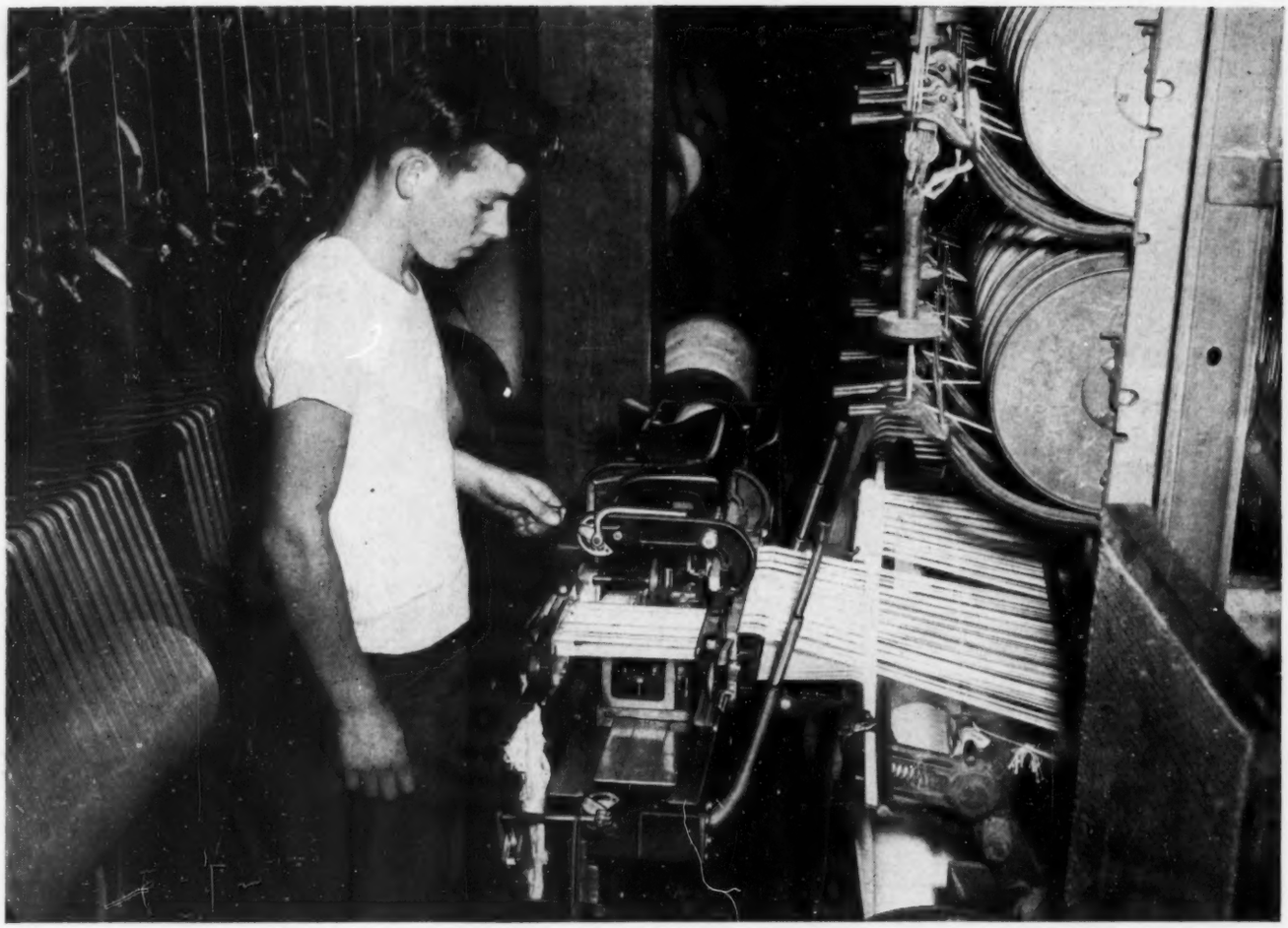
WHITNEY SILENT CHAIN

Product uniformity is a must in weaving of cloth. Misweaves make "seconds" . . . may mean the difference between profit and loss.

As a manufacturer or user of weaving machines, you can keep your rejects down to a minimum by using Whitney Silent Chains. These tough, rugged chains deliver full power without friction loss or slippage from power source to driven mechanisms. Their positive grip helps to maintain product uniformity by transmitting constant motor speed. They absorb shock loads without breakage. And because they are precision built of heat-treated alloy steel, Whitney Silent Chains give long life with minimum maintenance.

No matter what type of equipment you manufacture — from weaving machines to printers . . . or the type of equipment you use in your mill . . . it will pay you to *standardize* on Whitney Chain and Accurately Cut Tooth Sprockets — the *all steel drives.* Write for complete information and specifications.

THE WHITNEY CHAIN & MANUFACTURING CO.
223 Hamilton Street, Hartford 2, Connecticut



PHOTOGRAPHED AT J. S. MASON & SONS, INC., WESTBORO, MASS.

BARBER-COLMAN PORTABLE WARP TYING MACHINE SHOWS SAVINGS ON RIBBON LOOMS IN THIS WAY...

The warp on these ribbon looms is supplied partly by the individual spools above and partly by the large beams below. With this improved arrangement, the Barber-Colman *Portable* Warp Tying Machine can then be used for replenishing the lower beams and is able to effect a worthwhile saving. One weaver can now tend four of these looms, instead of only two as formerly. Each beam is tied in two sections or bites with the Barber-Colman machine. Each section or bite is converged during the machine-loading process to increase the sley. Even if small gaps are left, as shown in the picture above, the knotter mechanism will travel ahead until the sensitive selector needles pick up the proper pair of ends from the old and new warps. Barber-Colman Portable Warp Tying Machines are easy to operate, adaptable to a wide variety of conditions (as witness the somewhat unusual application shown here), are accurate and reliable, and have shown very low maintenance costs. Your Barber-Colman representative is available to discuss with you any possible applications for the machine in your mill.

DATA FROM THE MILL
C & K SPACE LOOMS Narrow Fabrics — Wide Beam Set-Up Zipper Tape MODEL "LC" PORTABLE WARP TYING MACHINE One Operator
4 Beams End to End per Loom 651 Ends per Beam — 18 sley 30s/2 Cotton TYING-IN TIME — 40 MIN.
Use of Portable Warp Tying Machine and wide beams has enabled mill to increase production from 2 to 4 looms per weaver.

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

BARBER-COLMAN COMPANY

ROCKFORD • ILLINOIS • U. S. A.

FRAMINGHAM, MASS., U. S. A. GREENVILLE, S. C., U. S. A. MANCHESTER, ENGLAND

DUAL DELIVERY
for better pin control on yarns prior to roving

QUAD DELIVERY
for fullest advantage of this new type of drafting on light weight sliver

Warner & Swasey Pin Drafter

TRADE MARK

IMMEDIATE PROFITS TODAY... BIGGER PROFITS TOMORROW

You can use these new type pin drafters *right now* with your present machines, and get faster production and better quality fabrics.

... and they will pay even more *tomorrow* as other improved textile machines become available for the eventual universal system.

Our Field Engineer in your territory is experienced and can give you complete information.

BRANCH OFFICES
Rivulet Mill
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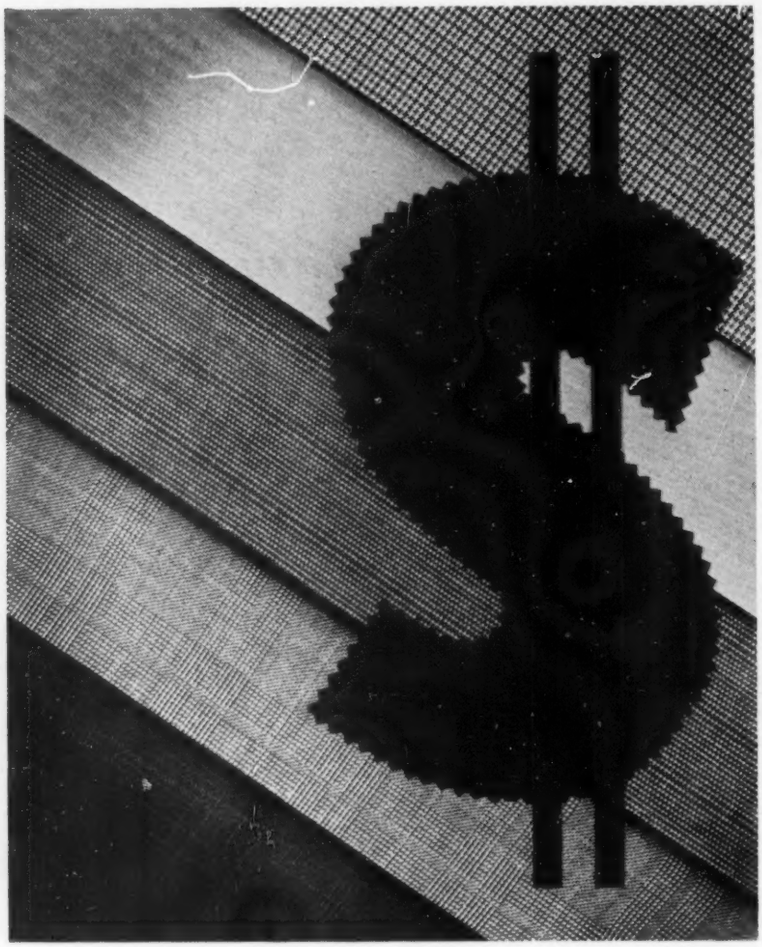
WARNER & SWASEY
Cleveland
TEXTILE MACHINERY DIVISION

You can do it better, faster, for less . . . . . with a Warner & Swasey

Men . . . women, too . . . agree
there's plenty of price appeal
in "the good rayon suit"



Cool, well-groomed summer comfort . . . at a price . . . is part and parcel of the good rayon suit. Discriminating men, and women too, rate it tops . . . so, enjoy your share of this profitable market.

Celanese Corporation of America, 180 Madison Avenue, New York 16.

The suitings shown here, top to bottom, are from: Burlington Mills, Wollman Mills, Dan River Mills, Colonial Mills, J. P. Stevens. Overlay fabric from Celanese Corporation of America.

the best rayon suitings contain

Celanese*

ACETATE RAYON
STAPLE FIBER

*Reg. U. S. Pat. Off.

For less bolster wear, smoother running spindles,

Gulf Lubrication Engineers recommend

Superrefined by Gulf's exclusive Alchlor Process, Gulfgem Oil has unmatched resistance to oxidation and sludge deposits. Thus Gulfgem lasts longer in spindle service — users report that it outlasts spindle oils by as much as four to five times.

With good operating practice Gulfgem Oil reduces frequency of cleaning bolsters. Cleaner spindles and bolsters insure substantial savings in power costs!

Gulfgem Oil has outstanding lubricating qualities—insures less wear, fewer spindle and bolster renewals, and greater freedom from spindle wobble.

Call in a Gulf Lubrication Engineer today and ask him to explain the many advantages of Gulfgem Oil. This superior spindle oil is available in four grades with the proper range of viscosities for every type of high speed spindle. Write, wire, or phone your nearest Gulf office.

Gulf Oil Corporation • Gulf Refining Company

Division Sales Offices:

Boston • New York • Philadelphia • Pittsburgh • Atlanta
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GULF INDUSTRIAL LUBRICATION

NO MORE *TIPPY* WOOL

with

ANTHOMINE*

on the job!

IN ALL WOOL DYEING OPERATIONS *ANTHOMINE* INCREASES THE AFFINITY OF WOOL FIBRES FOR DYESTUFFS.

THIS RESULTS IN LEVEL SHADES WHEN DYEING STOCK, YARN OR PIECE GOODS.

TIPPY AND BLENDED WOOLS ARE DYED A SOLID SHADE BY ADDING *ANTHOMINE* TO THE DYE BATH.

Mills throughout the country use **ANTHOMINE** *for:*

- Even dyeing
- Brighter, fuller shades
- Quicker, better exhaustion of dyebath
- Softer, more pleasing "hand"
- Reduced processing time

Send for Technical Service Bulletin #203-100.2 for complete information, including how to use ANTHOMINE for Top and Yarn Dyeing, Pressure or Package Dyeing, Leveling Unevenly Dyed Yarn or Shady Pieces, Dyeing Metallized Colors, etc.

Arkansas Co. INC.

Manufacturers of Industrial Chemicals for Over 40 Years

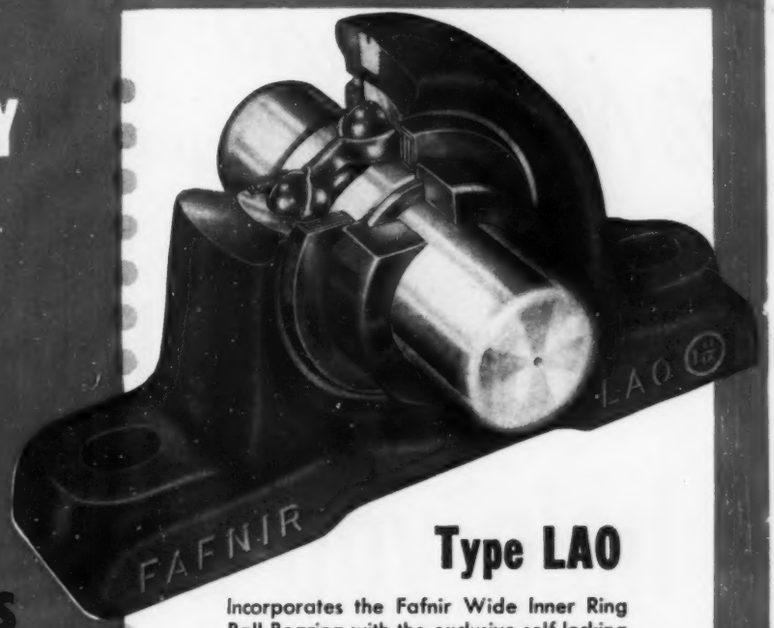
NEWARK, NEW JERSEY

*Reg. U.S. Pat. Off.

MORE CAPACITY in LESS SPACE

with FAFNIR'S new line of heavy duty

PILLOW BLOCKS



Type LAO

Incorporates the Fafnir Wide Inner Ring Ball Bearing with the exclusive self-locking collar . . . PLUS Mechani-Seals

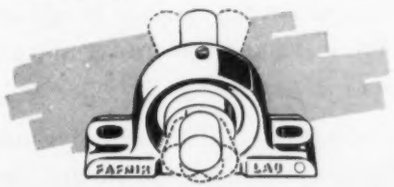
Prelubricated . . . with provision for relubrication. Sizes for 1 3/16" to 2 15/16" shafts.

COMPACT, STREAMLINED DESIGN.

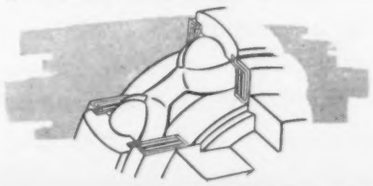
One-piece housing, reinforced at stress points for extra strength. Can be mounted in any position.

HEAVY SERIES FAFNIR WIDE INNER RING BALL BEARING WITH SELF-LOCKING COLLAR.

UNRESTRICTED SELF-ALIGNMENT IN ALL DIRECTIONS



MECHANI-SEALS PLUS integral synthetic rubber and felt washer. External slinger throws off contaminants.



Not only more capacity in less space but more ball bearing pillow block for the money. Write for full details. The Fafnir Bearing Company, New Britain, Connecticut.

FAFNIR

BALL BEARINGS

MOST COMPLETE LINE IN AMERICA

Your employees want to help you build security

HERE'S HOW 7,500,000 WORKERS ARE DOING IT

More than 20,000 companies now maintain the Payroll Savings Plan, by which their employees invest in U. S. Savings Bonds automatically every pay day. This Plan builds security not only for the individual employees, but for their companies and for the nation!

As you know, Savings Bonds pay $4 at maturity for every $3 invested. Thus they help create a "rainy-day" fund for each Payroll Saver, increasing *his* security.

How P. S. P. helps employers

America's leading corporations report these *company* benefits from the Payroll Savings Plan: As Bonds increase the worker's economic peace of mind, plant morale improves. Production increases—because absenteeism, labor turnover, and the accident rate all decline. Relations improve between employer and employee.

Savings Bond dollars are dollars removed from the spending stream. They are deferred purchasing power—an assurance of good business during the years to come. The Treasury uses net Savings Bond dollars to help reduce inflationary credit potential in the banking system by retiring short-term bank-held Federal securities. So Bonds increase the *nation's* economic security, too!

Proof that employees want P. S. P.

Practically everybody wants to *save*. Every one of your employees could be saving *more* if he were obtaining Savings Bonds regularly, right where he works. Even with today's high prices, it has been proved that between 40% and 60% of America's working millions—at any wage level—can and will buy Bonds through Payroll Savings *if management sponsors the Plan and if a fellow worker asks them to sign up.*

Yes—your employees want to help you build security—for all of us. It's up to you whether they get the chance. All the help you need is available from your State Director, U. S. Treasury Department, Savings Bonds Division. While it's on your mind, why not call him? Or write the Treasury Department, Washington 25, D. C.

The Treasury Department acknowledges with appreciation the publication of this message by

TEXTILE INDUSTRIES

This is an official U. S. Treasury advertisement prepared under the auspices of the Treasury Department and the Advertising Council.

new!

Superlitefast

DIRECT DYES

REG. U.S. PAT. OFF.

ORANGE

LLLWF

exceptionally fast to light and washing

features:

★ 150-300 hours light fastness.

★ extremely level dyeing in all percentages.

★ leaves acetate white.

★ exceptional wash fastness at 160° F *with soap and soda,* even without resin treatment.

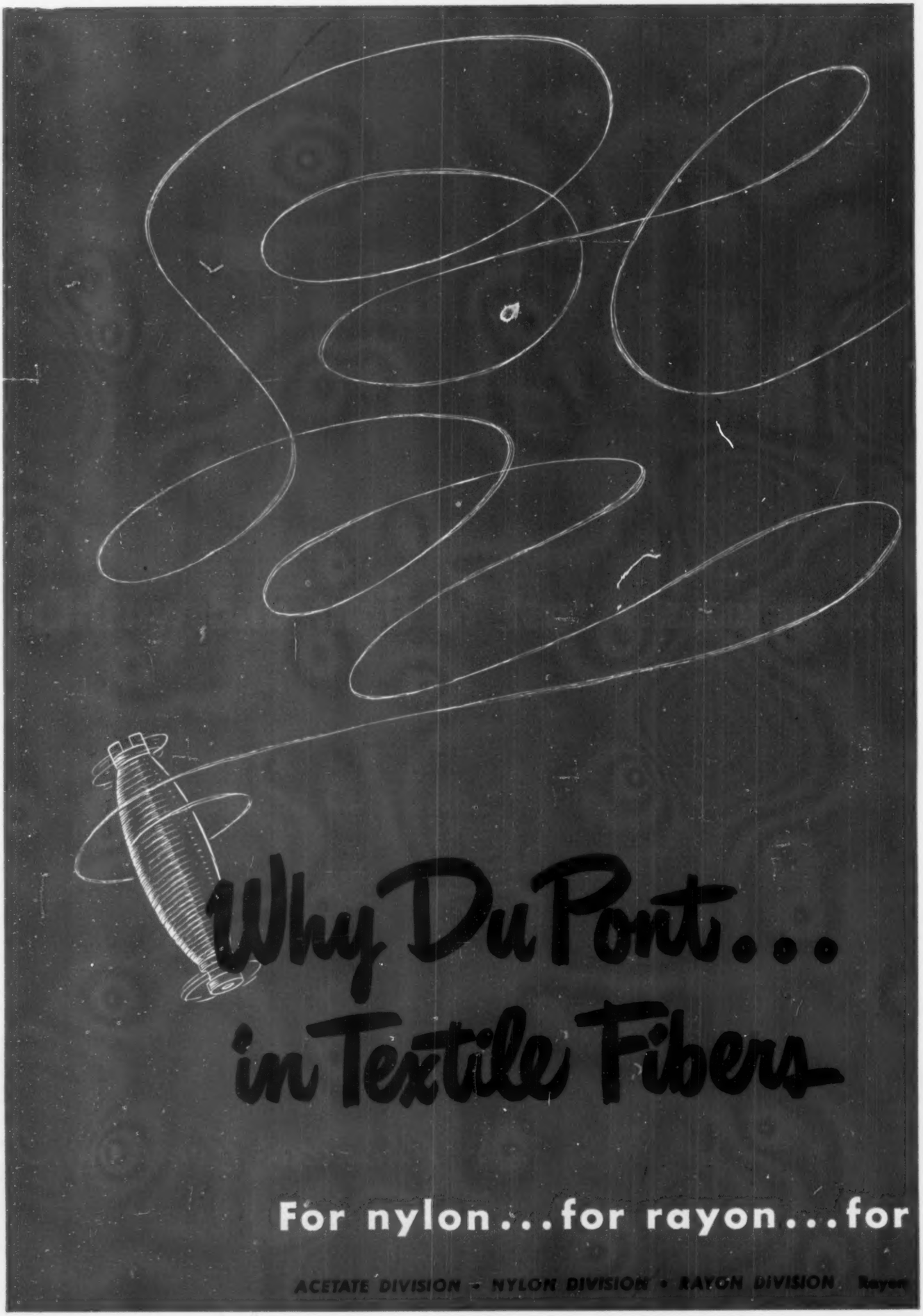
★ light fastness is not materially affected with curable resins.

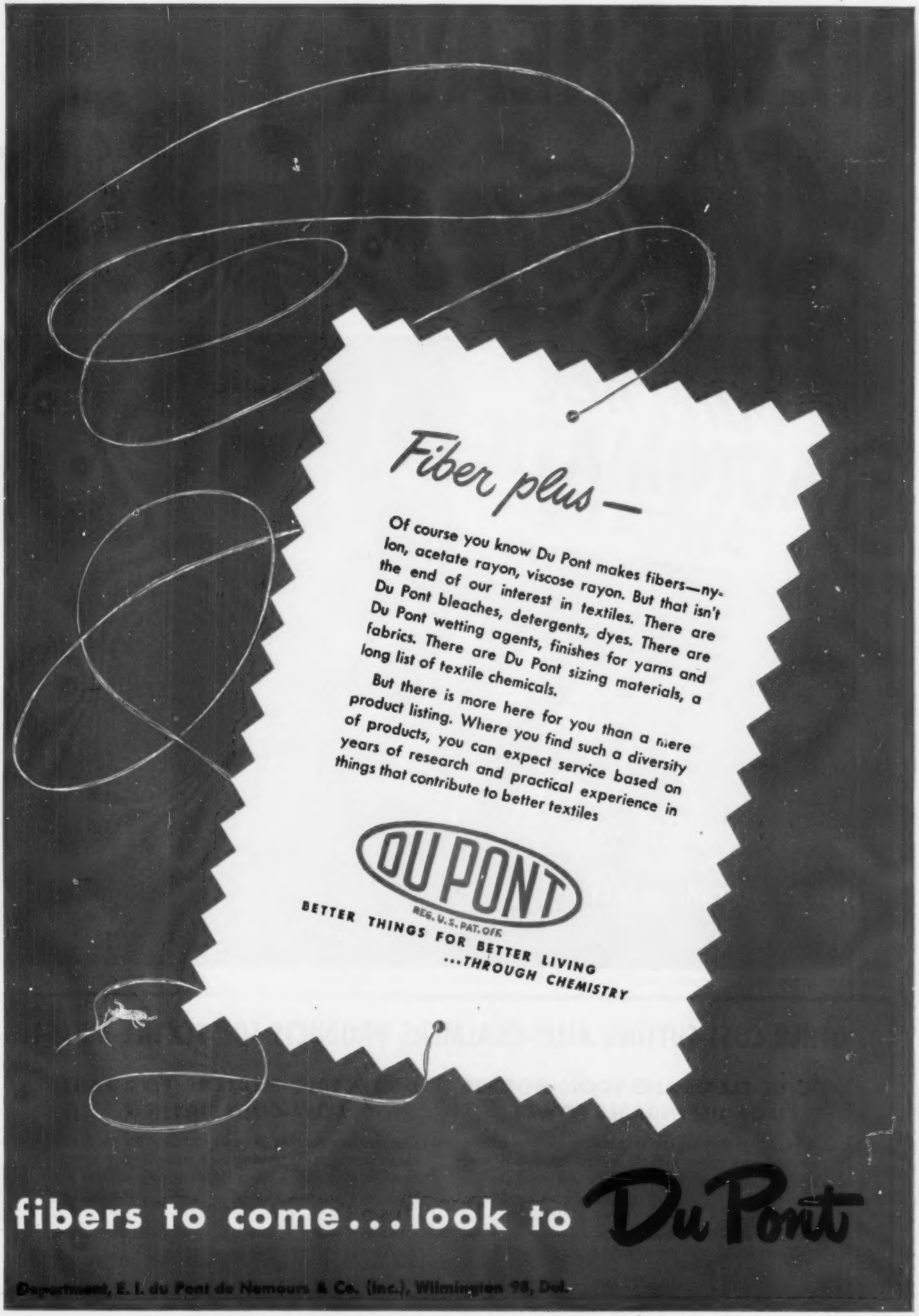
ALTHOUSE

Chemical Company, Inc.

READING · PA.

pace-setter in precision dye-making


Why DuPont...
in Textile Fibers
For nylon...for rayon...for
ACETATE DIVISION • NYLON DIVISION • RAYON DIVISION
Rayon


Fiber plus —
Of course you know Du Pont makes fibers—nylon, acetate rayon, viscose rayon. But that isn't the end of our interest in textiles. There are Du Pont bleaches, detergents, dyes. There are Du Pont wetting agents, finishes for yarns and fabrics. There are Du Pont sizing materials, a long list of textile chemicals.
But there is more here for you than a mere product listing. Where you find such a diversity of products, you can expect service based on years of research and practical experience in things that contribute to better textiles
DU PONT
REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY
fibers to come...look to Du Pont
Department, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Del.

NEW SHEAVE
Changes Speed

OTHER COST-CUTTING ALLIS-CHALMERS PRODUCTS FOR TEXTILE MILLS!

QUICK-CLEAN AND LOOM MOTORS FOR DEPENDABLE POWER

Quick-Clean motors, the original wide-open textile motors, now have ball bearings lubricated and sealed at the factory. They need no attention for years. Proper lubrication is assured and usual bearing maintenance procedures are eliminated. Sizes from 2 to 15 hp. *Loom motors,* immediate delivery, totally-enclosed, non-ventilated type, ¾ and 1 hp.

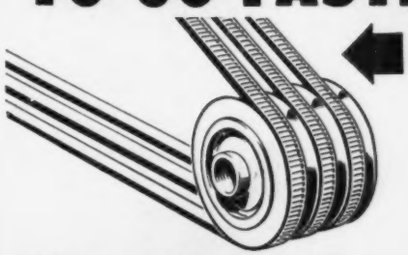
DIELECTRIC HEATERS FOR FAST, LOW-COST DRYING

Outstanding records in many textile mills for faster twist setting, cake drying and other drying operations. This method offers better quality control because of close heat control . . . and greater product uniformity because heat is uniform throughout material regardless of thickness. Results cannot be duplicated by any other process.

Without Stopping

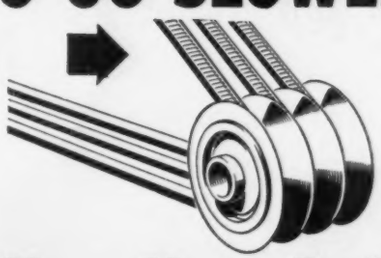
INSTANT SPEED CONTROL AT LOWER COST THAN EVER BEFORE

TO GO FASTER



Move Motor Forward

TO GO SLOWER



Move Motor Back

ONE HAND DOES IT...*While Motor is Running*

★Covers most speed changing needs from 3 to 20 hp.

★Extremely simple—one sheave does all.

★Infinite variations to approximately 2:1 speed range.

★No need to stop machine or take load off.

Here is the simplest, lowest cost way ever devised of changing machine speeds without stopping the machine. Simply move the motor forward to increase speed and move it back to decrease speed. The new *Vari-Pitch* Automatic Sheave adjusts groove width and side pressure to the new belt position *automatically*. Proper belt tension is always maintained. All other parts of the drive are standard *Texrope* V-belt drive components.

This new method of speed control means easier, better control of loom, spinning frame, and other machine speeds. Speed can be adjusted instantly for changes in materials, to get every last ounce of production from each machine. You lose no production because the machine continues to operate.

The Vari-Pitch Automatic Sheave saves you money three ways . . . low initial cost . . . higher production from each machine . . . less down time for changes. Get complete details from your A-C Authorized Dealer or Sales Office or write for Bulletin 20B7223.

ALLIS-CHALMERS, 1054A SO. 70 ST.
MILWAUKEE, WIS.

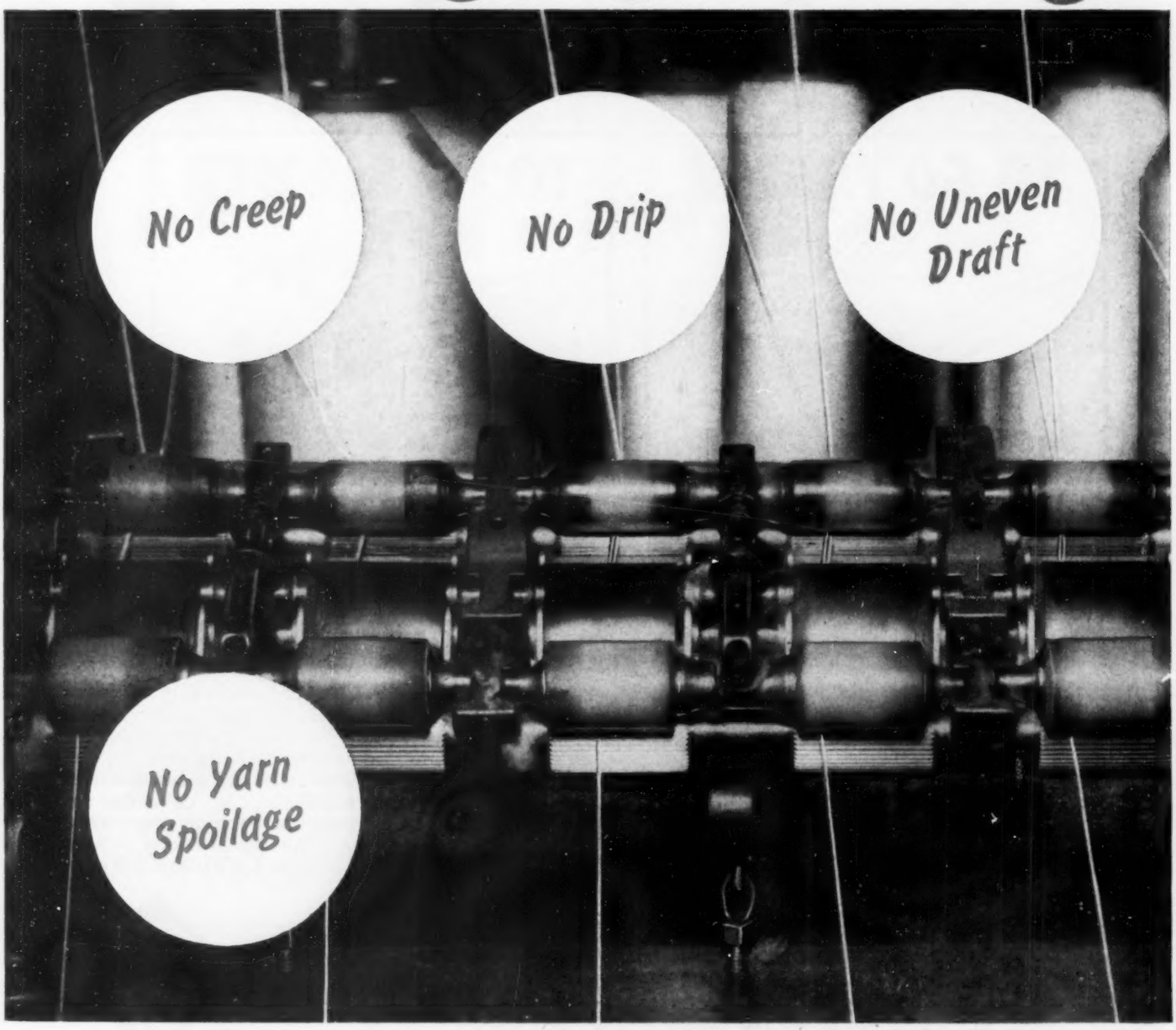
Texrope, Vari-Pitch and Quick-Clean are Allis-Chalmers trademarks.

ALLIS-CHALMERS

A-2731

Originator of the Multiple V-Belt Drive for the Textile Industry

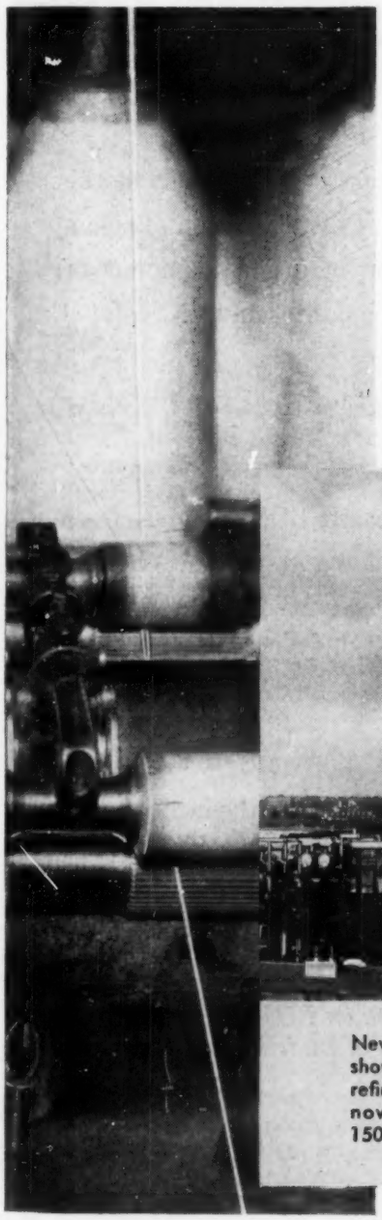
Sinclair NO-DRIP 4 Big Spinning



SINCLAIR

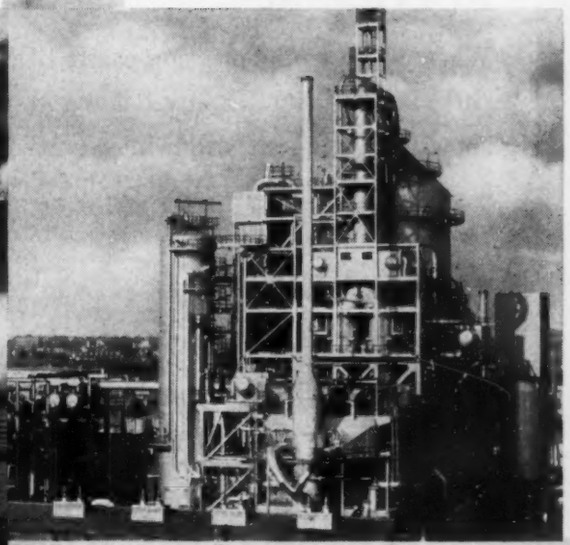
YOUR NEAREST SUPPLIER OF SINCLAIR PRODUCTS WILL GLADLY ARRANGE

LUBRICANT Solves Room Problems



In the spinning room, production may be retarded unless the top rolls are lubricated properly. The problem is to provide adequate lubrication while avoiding creeping of the lubricant or drip onto bottom rolls. A lubricant spreading onto the roll cots will spoil the covering and stain the yarn.

Sinclair NO-DRIP Lubricants have the correct combination of properties to provide desired performance. They reach all the parts where lubrication is needed—*but they do not stray away.*



New Fluid Catalytic Cracking Stills (like the one shown here) are helping to expand Sinclair's refinery output. Sinclair's great refineries are now turning out products at the rate of 150,000,000 gallons of lubricating oil yearly.

About 40% of all the Aircraft Engine Oil used by domestic Airlines in the U.S.A. is supplied by SINCLAIR. The same careful research that developed this high quality oil for the Airlines is put into NO-DRIP and other Sinclair Oils.

TEXTILE LUBRICANTS

FOR LUBRICATION COUNSEL, OR YOU MAY WRITE TO SINCLAIR REFINING COMPANY, 630 FIFTH AVE., NEW YORK 20, N. Y.

Announcing

A New Product for DYERS and PRINTERS

LOMAR PW the new dispersing agent developed by Jacques Wolf & Co., assures more efficient and economical processing.

• *In Dyeing*

Level shades and uniform absorption of dyestuffs by the fibres, depend largely upon an even dispersion of colors in the dyebath. The addition of a small amount of LOMAR PW in pasting up indanthrenes or acetates solves this problem.

• *In Printing*

When added to the printing paste, LOMAR gives finer particle suspension, improved flow and smoother consistency. By keeping the colors in suspension, LOMAR PW assures efficient, economical results.

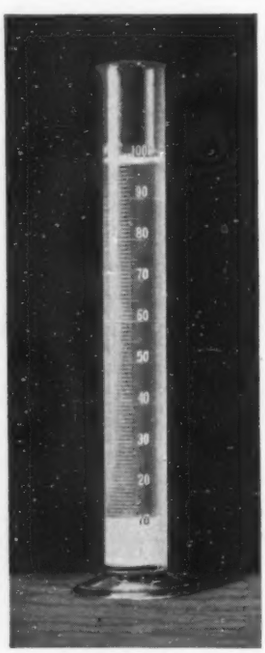
• *In Backfilling*

In backfilling, LOMAR PW is added to the heavy backfill mixture of clay and starches to give uniform suspension of the clay, good flowing properties and more uniform results on the fabric.

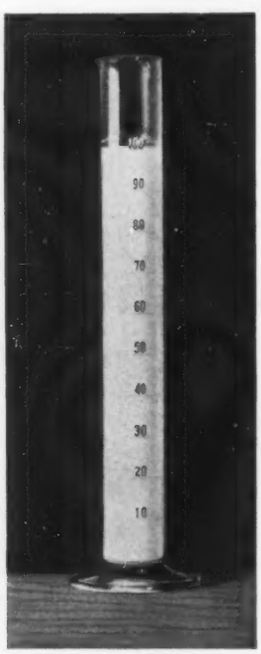
For complete information on LOMAR PW, send today for your copy of Bulletin No. 21.

TYPICAL OF THE DISPERSING ACTION OF LOMAR PW

The contents of these two graduates are identical, except for a small percentage of LOMAR PW. Note the continued even suspension and dispersion in the right hand graduate after standing ten times as long as the one at the left.



Blanc Fixe after 30 minutes — no dispersing agent



Blanc Fixe after 5 hours — plus LOMAR PW

Plants and Warehouses

Plants: Passaic, Carlstadt, N. J.; Los Angeles, California

Warehouses: Providence, R. I.; Philadelphia, Pa.; Utica, N. Y.; Chicago, Ill.; Greenville, S. C.; Chattanooga, Knoxville, Tenn.

WOLF BRAND PRODUCTS

JACQUES WOLF & CO. *Chemicals* PASSAIC, N. J.

Textile Industries

JUNE 1949

Believers in Government by Handout—

THE GIMMECRATS

Gimmecrats have an indestructible faith in the ability of the government to tax somebody else for their benefit.

IN EVERY land and in every age you will find them—the Gimmecrats—the people who ardently believe in Government by Handout. Politically, they are the expression of the age-old craving for "Something for Nothing."

The Gimmecrats believe that it is the function of government to provide for them anything they think they need, and are too lazy, incompetent or trifling to provide for themselves, and of course they want it provided at somebody else's expense.

So long as the Gimmecrats are in a hopeless minority, they are usually contemptuously referred to by the rest of the populace as Bums. As they become more numerous, however, and as venal politicians cater to their sordid demands, they achieve a certain degree of respectability. Finally, when they become numerous enough, they constitute a powerful political party of their own, and may call themselves Communists or Socialists or New Dealers or Fair Dealers or some such term, but the moving spirit behind them is the same in any case—they want the government to provide for them, and to take the provisions from somebody else.

The Gimmecrats, like the poor, are always with us, and there are, also, always with us politicians willing and anxious to build powerful regimes on the ceaseless thirst of the Gimmecrats for somebody else's substance. The Athenian politician, Pericles, gained fame by catering to the local Gimmecrats. By the simple expedient of robbing the treasury of funds collected for the common defense, he obtained the means of buying the favor of the Gimmecratic faction in Athens, and has long been regarded by historians as a statesman of parts for his notable achievement in beautifying his city with some magnificent works of art, while at the same time completely corrupting the morals of the citizens.

For several centuries, the citizens of Rome were splendid examples of Gimmecrats who had brought their peculiar form of government to a high state of perfection. The Roman populace in general lived almost completely off of the government, and did it according to the best traditions of Gimmecratic rule; that is, by contributing nothing and robbing the rest of the world. So long as there were populous nations to loot, the Roman Gimmecrats could make their racket work very well, but the system fails when there are no tributary nations to loot and the Gimmecrats become so numerous that they have to start looting each other. We have just about reached that stage in this country, yet the clamor is ever for more government bounty and bigger handouts.

Last year the government put up something like 200 million dollars just for the one minor item of buying potatoes to throw away, so that the public could have fewer potatoes and the potato growers could have more money. The government also dropped a comfortable number of millions keeping the price of peanuts so high that many makers of peanut candy had to quit making it.

An item in one of the Atlanta newspapers a few days ago covered the remarkable profits to be gained by raising Lupine seed in Georgia. Some farmers who were explaining what a nifty profit they expected to make on their Lupine seed crop were asked by a newspaper reporter if the Lupine seed market might not crack under an over-supply, but the farmers replied that what they couldn't sell to people who wanted Lupine seed, they could dispose of to one of the Alphabet Soup Agencies of the government at an artificially pegged price.

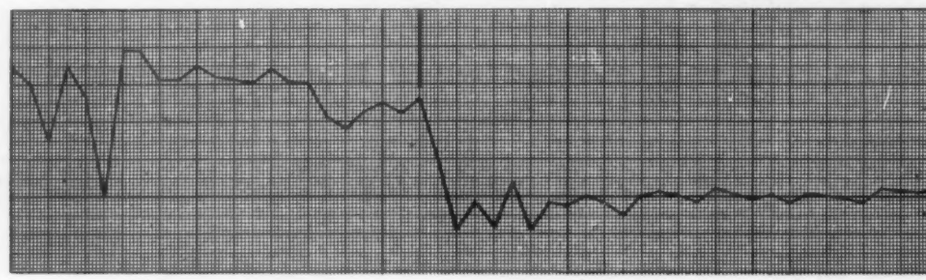
Our government is committed to holding up the price of cotton while deploring the high price of clothing and other cotton goods; to supporting a high price for wheat and other edibles, while making violent motions about getting down the cost of eating.

Our government is also committed to seeing that millions of per-

Less Waste Means Lower Costs

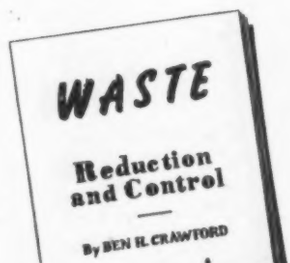
Waste Made BEFORE Service

Waste Made AFTER Service



We Guarantee These Results:*

- Less Waste
- Closer Control of Waste
- Better Handling of Waste
- Lower Unit Cost



FREE copy of 20-page reprint booklet upon request (limited to mills in U. S. only).

One Mill Man says: . . . "The actual results in waste reduction are gratifying, and any way we figure it, we save the cost of your work very quickly . . ."

Another says: . . . "First I would like to say the program was a complete success . . . Our waste has now been reduced over 2% and the reduction is continuing . . . ."

Inquiries invited (service confined to domestic mills)

* *Names of mills using our service furnished upon request.*

SOUTHEASTERN ENGINEERING CO.

West Point, Georgia

"Specializing in Waste Reduction and Control"

sons can build houses or rent apartments costing about twice as much as they can afford to pay. Some of our most prudent statesmen have finally yielded to the Gimmecratic clamor and are supporting these crack-brained schemes for giving millions of people more than they can earn.

A proposal is now before Congress for permanently subsidizing the production of many staples so that the persons who produce them will get a larger number of dollars for their products than they are worth, while the persons who consume them will be able to buy them for fewer dollars by the simple expedient of paying more dollars to the tax collector, who makes up the difference.

The funniest part about all of this foolishness is that none of it is new. We are going through the same old cycle that the Egyptians, the Greeks, the Romans, and perhaps a thousand other nations, went through as the omnipresent and ever-industrious Gimmecrats successfully clamored for government aid. It is so easy to think you are taxing somebody else while actually taxing yourself, and it is so pleasant to think that you are living off of the proceeds of somebody else's taxes!

Several years ago when taxes were first running at incredible levels, and there was much airy talk about this country having to go on indefinitely paying a tax bill of 30 or 40 billion dollars a year, we ventured to point out that this was an impossibility unless we brought out some new dollars, worth less than the old ones.

We still think it is an impossibility for the people of this country to pay 40 billion dollars a year in taxes. We have not *really* been paying all of the taxes that we have *apparently* paid during these past few years. It must not be forgotten that during the war this government put into circulation around 250 billion dollars' worth of pure inflation, and that so long as all of this fabulous amount of imaginary value is sloshing around in the national economy, it is going to be possible to scoop up a good bit of it here and there and call it "taxes." This process was particularly noticeable at the height of the war, when the government was spending around 100 billion dollars a year to get about 30 or 40 billion dollars' worth of value, and was taking about 40 billions of it back from the people and calling this money "taxes."

Gimmecrats believe that it is the function of government to provide for them anything they think they need, and are too lazy, incompetent or trifling to provide for themselves, and of course they want it provided at somebody else's expense.

A government can collect practically any amount of taxes it chooses, if it will spend enough money. All it has to do is to pay far too much for everything it buys; make the people who got the money kick back some of it to the government, and call this money "taxes."

The careless billions so thoughtlessly tossed into the hopper during the war are gradually disappearing from the customer's pockets. People are now having to begin to buy stuff with their own money that they earned themselves, and this condition causes a canker in the soul of every earnest Gimmecrat, and he longs to see a return of the good old days when everybody had plenty of money for doing little or nothing.

The present crop of legislators in Washington seems to sympathize with this earnest effort to dig more money out of our supposedly inexhaustible treasury. There is a serious proposal afoot to give everybody free medical, dental, and hospital attention. Another stalwart leader of the Gimmecratic host proposes a pension of $90.00 a month for every person who was in service during our various wars. It is doubtful if any large proportion of the veterans want any such handouts. Anyway, in a few more years the supposed beneficiaries of this handout would be paying the taxes for it.

When any people are anxious for the government to take over the problem of providing for them, they must be willing to turn over to the government a sufficient portion of their incomes to make the provision. A few persons with larcenous intent can manage to live well by mooching from the many, but when millions start mooching, the system has to break down. A government can not buy anything for you with your own money as cheaply as you can get it for yourself, and any belief to the contrary is a delusion and a fraud, but you can not convince the Gimmecrats of this; they have an indestructible faith in the ability of the government to tax somebody else for their benefit.

About 25 per cent of the cost of everything that we buy today is taxes, so that if an article costs a dollar, the government gets about 25 cents out of this dollar. If taxes were collected openly and directly from the man who has to foot the bill anyway, instead of being collected furtively and indirectly, the article would bear a price tag of 75 cents and the man who bought it would pay 25 cents in taxes. He would therefore know that this 25 cents was a tax on 75 cents worth of merchandise, and his enthusiasm for the government services for which he longs might be considerably dampened if he knew that the tax might go up to 30 cents or 40 cents on six bits worth of goods.

However, by camouflaging the taxes, as we now do, they are not regarded as taxes, but merely as an increase in the cost of living, so that the poor, deluded Gimmecrat instead of denouncing his Congressman for loading him down with all of this tax, fatuously demands more services from the government to make up for his inability to meet this increased cost of living.

Verily, it is a wonderfully comforting feeling to know that you can always get something from the government "free."

Keep them on the job-with *Eriez* Magnets

At National Worsted Mill, Jamestown, N. Y. . . . A Battery of Eriez Spiked Apron Magnets Installed Above Feeders protect Card Clothing From Damage.

Close up of the Eriez Spiked Apron Magnet. Unit is complete with hinges and aluminum angle frame. Ready for immediate and simple installation.

DAMAGE to machinery and fires caused by tramp iron can be simply and economically eliminated by the Eriez Permanent Non-Electric Spiked Apron Magnet. Whether you're processing wool, cotton, rayon or sisal, experience proves that this powerful magnet is a positive way to remove tie buckles, ring travelers, fine wires, nails, bottle caps, etc. from your fibers. Many mills have completely eliminated damage to card and garnet clothing . . . Still others have stopped picking room fires . . . Consequently, there are no shutdowns, no let up in production or expensive time losses. With Eriez permanent magnets, you get the application engineering that means the correct magnet for each tramp iron removal job . . . Powerful Eriez Permanent Non-Electric Magnets, designed solely for textile use, are the strongest commercially produced.

Check these advantages:

1. Superior Cleaning Ability.
2. No Wiring for Electric Current Needed . . . No Coils to Burn Out.
3. Cool Running . . . No Loss of Magnetism Through Heating Up.
4. Not Affected by Moisture or Wet Materials
5. No Operating Costs . . . First Cost is Last Cost.
6. Minimum Installation Cost.
7. Simple . . . Powerful . . . Permanently Magnetized.
8. Uninterrupted Operation . . . Top Efficiency Always.
9. Easily Installed in Original Equipment.

Pioneer of PERMANENT Magnetic Separation

See our catalog P $\frac{1b}{2}$ Sweet's Process Industries File.

Write for bulletin 104-A

ERIEZ MANUFACTURING COMPANY

1501 East 12th St. • ERIE, PA.

NEWS in BRIEF

Predicts Cotton Upturn. A rapid upturn in cotton textile business by late summer has been predicted by Dr. Claudius T. Murchison, president of The Cotton-Textile Institute.

Full-Time Operations Guaranteed. Union organizers in some sections of the country have been known to assure operatives in unorganized plants that once the mill is organized, full-time operations will be assured. No acceptance of this statement by employees is known.

Man-Made "Frost" to Aid Cotton Farmer. A coal-chemical that acts as a man-made frost to wither and drop leaves of cotton plants is said to hold promise of increasing the financial return to cotton farmers by as much as $35 per acre. Pickers can do a faster and cleaner job with the leaves gone. Manufactured by Koppers, the "frost" is sprayed on cotton fields from hedge-hopping airplanes.

Men's Preference for Summer Suits. A recent survey by the Bureau of Agricultural Economics showed that 62% of the men questioned preferred wool and wool mixtures with other fibers in their summer suits. Other figures: 8% preferred cotton; 7% preferred rayon.

Exchange of Research Information Depends! When asked if he would consent to the free interchange of research information among the largest textile companies sponsoring research programs, one research leader replied, "It depends on management's policy toward research in the other organizations. If management's policy is *directed* toward research—the answer is yes. You can sponsor research and go through the motions of research without actually doing anything."

Maintenance Programs Under Way. Many mills are using slack times to advantage by instituting thorough maintenance programs on machinery. One spokesman contended that this is the first opportunity for major maintenance work in seven years—expects to spend $400,000 on needed work.

Woolen and Worsted Minimum Wage. Establishment of a minimum wage of $1.05 an hour, or $42 for a 40-hour week, in the woolen and worsted industry for work performed under the Walsh-Healey Public Contracts Act, has been ordered by the Secretary of Labor. A tolerance was established for learners and beginners.

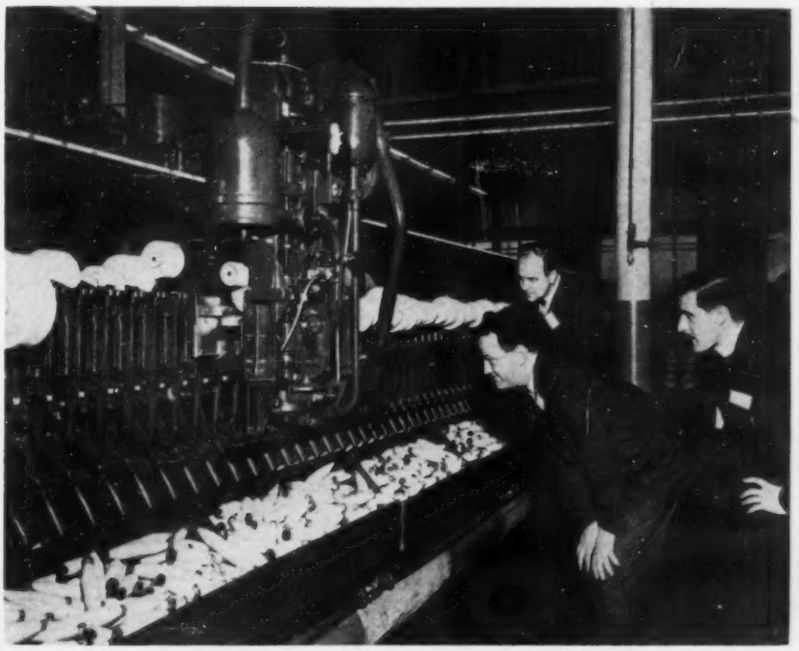
Milliken Heads ITT. Roger Milliken, president of Deering Milliken & Co., has been reelected chairman of the board of the Institute of Textile Technology, Charlottesville, Va.

Guaranteed Annual Wage Bill. A bill before Congress proposes to require that an employer engaged in the production of goods for governmental agencies, under the Walsh-Healey Public Contracts Act, "shall guarantee in advance thirty hours of wages for each of forty calendar weeks." Opinion in textile circles is that this would place hardships on employers and make it almost impossible for military agencies to procure supplies and equipment.

TELL YOUR STORY TO THE PUBLIC

Industry works with educators. Here New England high school teachers make a tour of the Crown Manufacturing Company's plant at Pawtucket, R. I. Open houses and plant visits by educators and legislators are part of a broad industry-wide public relations program.

For other methods of improving public relations, see the 20-page feature story, "A Working Plan for Public Relations," beginning on page 95.



★ SODA ASH ★ CAUSTIC SODA ★ CHLORINE
★ BICHROMATES ★ BICARBONATE OF SODA ★ SILICATE OF SODA

Chemicals you live by

NEW TWISTS ON AN OLD TALE

The handling and storing of chemicals is to you an old tale. As it is to us.

However, DIAMOND ALKALI continuously studies the problem of unloading, handling and storing. From time to time, it develops improved methods. Often special means are devised for solving individual problems which arise out of local conditions.

Your DIAMOND salesman is posted on these new angles. It isn't something he would bring into the conversation just cold. But if you will ask him, you will find he knows a lot about chemicals beyond the mere selling of them. Next time you have a problem, please feel free to put your DIAMOND salesman's broad knowledge and the facilities of DIAMOND's Technical Service staff to work for you.

DIAMOND ALKALI COMPANY • CLEVELAND 14, OHIO

DIAMOND ALKALI CHEMICALS

Seam Ripper. A new device invented by a housewife and an army sergeant can be inserted in place of a needle in a sewing machine to remove machine-sewn seams. Manufactured by Gilman Engineering and Manufacturing Company of Janesville, Wis., the ripper operates by spreading the weave without cutting the cloth.

Employee Interviewing as Public Relations Measure. A recent parody on applicant interviewing methods witnessed by mill men forcefully showed how the interview with prospective employees serves as a good or bad public relations tool. The interviewed applicant goes away with either a friendly or unfriendly attitude toward the company. Emphasized: There is no such thing as failure in psychological testing; psychological testing is "sampling the applicant's behavior." Never advise applicant he has failed.

Eye Clinic. The management of one mill which had conducted an eye clinic admitted that management's own eyes were opened—clinic showed that many employees on jobs had such vision that they could not possibly obtain the results expected of them. Twenty per cent of those tested had vision below standard, and a number were actually blind in one eye, a fact new to some of those in the blind condition. Seventy-one per cent of the cloth inspectors originally had vision below standard; after correcting, only three had sub-standard vision. Seconds increased with the better vision of the inspectors.

New Chemical Staple Fiber. A new chemical staple fiber in the rayon group is called Celcos. Combining the best features of both acetate and viscose staple fibers and having, in addition, an ability to cross-dye, an ease of processing and an absorptiveness for resin and other finishes, Celcos is reported to be an ideal all-purpose rayon staple fiber—either used by itself or blended with other fibers. Fabrics made thus far are said to be ideal for women's suitings and dress goods as well as for many types of men's wear suitings. It is expected that new applications will follow.

LABOR RULINGS AND DECISIONS

"PEACEFUL picketing of primary employer's trucks on premises of other employers to advertise dispute between picketing union and employer and to encourage other employees to refuse to handle primary employer's goods is a boycott."

"INCITING strike or walkout without resort to grievance procedure provided by contract may be proper where employees have reasonable belief that serious hazard to life or limb may occur, but to incite sympathetic strikes further in other plants of company to force employer to meet grievance demands was improper and just cause for decision."

"PARKING of automobile near scene of labor dispute with picket sign attached constitutes the exercise of constitutionally protected free speech."

"CONTRACT provisions that work-week of permanent employees shall be 'full week of 40 hours per week' is interpreted by arbitrator to be guarantee of a minimum of 40 hours work per week and obligates the employer to pay such employees for full work-week if they are laid off before working 40 hours."

Life-Time, Money-Back Guarantee on Men's Shirts. Cranston Prints Works Company is offering an unconditional, life-time, money-back guarantee on all men's shirts made from Cranston printed fabrics—the first such guarantee known to be offered on a printed shirt fabric. Guarantee tags are offered by Cranston through their converters to all shirt manufacturers using Cranston-processed fabrics. Tags carry Good Housekeeping Seal of Approval.

Returns are made direct to Cranston—not to the retailer or the shirt manufacturer.

Tag which accompanies shirting made from Cranston's finished goods.

cranston
MONEY-BACK
GUARANTEE
If this Cranston shirting fails to give complete satisfaction, mail this tag and the shirt to Cranston Print Works Company, Cranston 9, R. I. with store name and date of purchase . . . and the full purchase price will be refunded.
LOOKS BETTER
FITS BETTER
WEARS LONGER
Guaranteed by Good Housekeeping

Suggests Industry Purchase Marginal Mills. A recent suggestion by a textile executive called for a plan whereby normally operating mills would buy and scrap spindles in marginal-producing plants. It was suggested that one of the textile associations might handle financial problems of the plan. Reason for the plan: "too many spindles." (See May '49 TEXTILE INDUSTRIES, page 71.)

Supplier Sales During Inactivity. Some suppliers of heavy textile equipment advise that during periods of decreased activity, sales of machinery classified as capital investment decrease, but supply parts for heavy equipment hold up well, indicating several tendencies (1) mills use periods of inactivity to do needed maintenance work; (2) mills prefer to expense

EMMONS • EMMONS • EMMONS • EMMONS • EMMONS • EMMONS • EMMONS

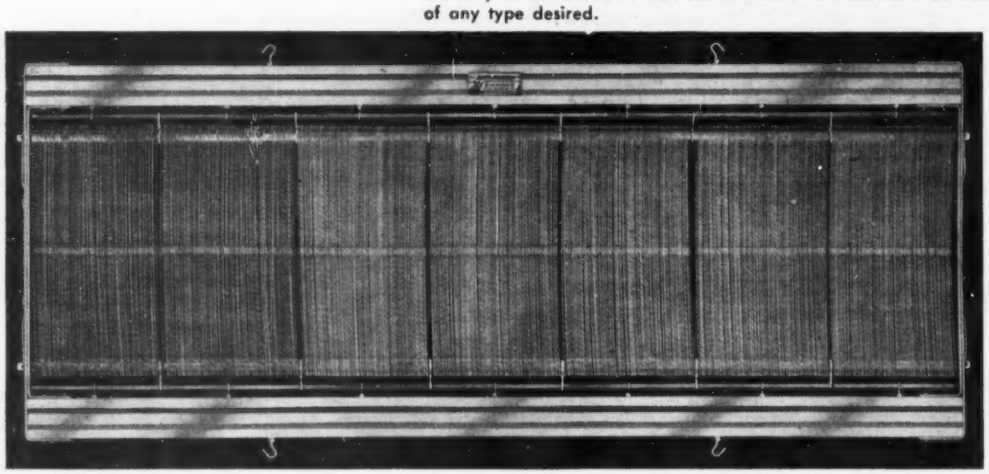
"New EMMONS ALUMINUM Heddle Frame Proves Itself!"

ALREADY OVER 100 MILLS AGREE

That EMMONS Revolutionary Aluminum Heddle Frames

- ✓ Have A New Rigidity That Greatly Reduces Distortion.
- ✓ Give Extra Efficiency On High Speed Looms.
- ✓ Stop Heddle Sticking (Heddles Slide Freely).
- ✓ Greatly Reduce Heddle and Yarn Breakage.
- ✓ Permit Increased Loom Speed.

The new Emmons Aluminum Heddle Frame is equipped with outside hooks and eyes that are adjustable laterally to any position and vertically to some extent. The frame comes with limited slide hooks of any type desired.



"Here Are Two Other Good Reasons Why Aluminum Frames Are Better Frames!"

- ✓ Aluminum Frames Won't Corrode Regardless of Weave Room Humidity.
- ✓ Aluminum Frames Are Many Times Stronger Than Wood and Last Longer.

For complete details write direct or see your nearest E Man.

"E" MEN ARE LOCATED AT:

CHARLOTTE
Branch Plant
GEORGE FIELD, Manager
P. O. Box 2036,
Phone — 3-7503

GREENVILLE
P. W. COLEMAN
P. O. Box 1393,
Phone — 2-3327

NEW YORK
W. S. TAYLOR
52 Vanderbilt Avenue
Phone — Lexington 2-6060

ATLANTA
ARTHUR HARRIS
P. O. Box 1982,
Phone — Main 2643

CHICAGO
ALBERT R. BREEN
80 E. Jackson Boulevard
Phone — Harrison 7140

EMMONS WEAVE ROOM EQUIPMENT

EMMONS LOOM HARNESS CO., LAWRENCE, MASS.

items rather than increase capital investment; (3) purchasing in industrial as well as consumer lines follows a psychological pattern of buying only necessities, even when money is on hand.

Replacing Top Men. With the return of tougher times in the industry, indications point to a return of the old management practice which modern executives hoped was gone with the boy sweeper. Reports are received of mills which fire the top man in a department to give the assistant the job at a lower salary for the mill, but a slight increase for the assistant.

The top man is seldom let go until he gets the mill into competitive production and in such shape that a less experienced man can carry on successfully. Opinion is that this type of operation will not pay off in the end because personnel policies of various plants become general industry knowledge, and the assistants who took the boss' jobs do not feel too secure in the new positions. Some of the immediate results of such policies: Assistant shops for job in another plant; high labor turnover and employee discontent.

Canadian Wool Picture. Normal annual requirements of the needs of Canadian woolen manufacturers stand at about a hundred million pounds; total Canadian production, shorn and pulled, is about ten million pounds. There is said to be practically no stockpile as is built up in other essentials.

Radio Isotopes. Commercial testing laboratories will soon be breaking a major story describing the adaptation of Manhattan Project atomic by-products for textile experimentation. Research men predict the solution of molecular construction of fiber problems which have been confronting the pioneers in fundamental textile investigations.

Duplication of natural fibers by synthesis may be a likely result of this bold application of radioactive isotopes. Other question marks which may be cleared concern the affinity of dyestuffs for various types of fibers. Manufacturing techniques are destined for improvement also. Elimination of soil streaks in woven fabrics due to contaminants from unknown sources will probably be the first step.

Fission elements may also be used for identification of blends, and percentage of fibers in the union, by means of Geiger counter readings of the intensity of radiation. Accurate testing of the efficiency of detergents in scouring is another benefit expected from this peacetime application of the A-bomb.

Textron Textile Scholarship. Georgia Institute of Technology has been granted a Textron scholarship to assist in covering school expenses during the senior year of an outstanding junior student. Winner is selected on basis of high academic achievement and outstanding leadership qualifications.

NEW RIBBON REPELS WATER

This new ribbon, shown being bombarded with a steady stream from a water pistol, shook off the drops without a spot, showing water-repellent characteristics. It is a Martin woven edge rayon grosgrain.

Cotton Print Resembles Worsteds. A double-printed cotton fabric resembling in texture and appearance worsteds, Donegal tweeds and herringbones, glen plaids and fall stripes, will be introduced to the trade shortly by the Krasom Company, Inc. The fabric, of heavy weight and sturdy construction, will be offered in 15 patterns.

Hand Knitting. The general interest in hand knitting has spread through the country, but the most important development is "small fry" interest. Little boys and girls are turning out creditable caps, mittens, socks, knitted dolls, etc.

Kellogg Looms Being Tested In Field. The M. W. Kellogg Company, manufacturers of the Kellogg "unit system" loom, are supplying certain weavers with batteries of new looms. It is reported that as many as ten looms are being distributed among weavers who will cooperate in field trials of the lately redesigned and improved version of the original pilot plant models. (See TEXTILE INDUSTRIES, April 48, p. 102.) Production at the Jersey City plant of Kellogg is being geared for volume output of these successors to the prototype loom. Informed sources claim that the loom has been adapted to the weaving of light and heavy weight cloths, and will yield 240 picks per minute. Troubles encountered in older test models are said to have been ironed out.

Knitwear Suppliers' Exhibition. Roy A. Cheney, president of the Underwear Institute, and Sidney S. Korzenik, executive director and counsel of National Knitted Outerwear Association, have announced in a joint statement that the directors of both organizations have approved the formulation of plans for an underwear-outerwear suppliers' exhibition to be held in New York City in the spring of 1950. Although exact dates have not yet been announced, it is planned to have the annual meetings of the two associations scheduled during the same week for the convenience of all concerned.

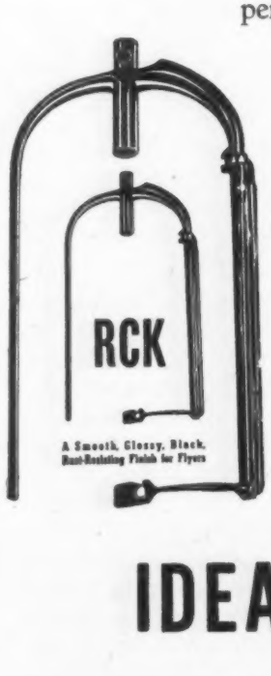
3 REASONS WHY

You should have flyers and spindles rebuilt at the same time

1. Both are rebuilt to original standard factory specifications so they fit perfectly and run smoothly. The flyers are finished with famous RCK Black or Rayon Bright and balanced at highest possible running speeds. Spindles are precision made to factory blueprint and tops are hardened to guarantee added years of service.

2. Flyers and spindles will be 100 per cent interchangeable from one frame to another.

3. You will be able to order standard flyers from the machine manufacturer and they will fit Ideal rebuilt spindles perfectly.



A quarter century of flyer and spindle experience at Ideal assures you an engineered rebuilding job second to none.

We furnish extra roving spindles and flyers while yours are being rebuilt.

IDEAL MACHINE SHOPS, INC.

PHONES 4161 and 4391

BESSEMER CITY, NORTH CAROLINA

25TH YEAR OF CONTINUOUS SERVICE TO TEXTILE MILLS

Industry Minimum Wage Clarified. Cotton and wool yarn spinning operations, whether conducted by a hosiery mill or by a source of supply from which such a mill purchases its yarn, are governed by the minimum wage which governs the hosiery industry, rather than by the minimum wages which govern the cotton or wool manufacturing industries. This is due to the fact that yarn spinning is rare in the hosiery industry rather than being the usual thing. This ruling especially affects the hosiery industry because it avoids any necessity to operate a plant under two minimum wages when engaged on a government contract.

Florida Encourages Industry. The State of Florida is actively encouraging industry to the state—says it has much to offer.

To Pool 1948 Crop Loan Cotton. All 1948 crop loan cotton, including American-Egyptian, still under loan on August 1, 1949, will be pooled on that date by CCC for producers' accounts. Producers may either sell their "equity" in the loan cotton or redeem the cotton from the loan and then sell it in the open market.

Munitions Board Survey. The Munitions Board is surveying the textile and seven other industries to find out whether coordinated procurement, practiced on a widening scale by the armed services, is getting anticipated results. The survey is also designed to produce information which can be used for future procurement planning.

Coring of Wools. America's widespread acceptance of the highly accurate shrink test for grease wools by coring is slowly bringing about a change in international marketing of the commodity. Various foreign interests are sitting up and taking notice of this significant development which seems destined to change the entire concept of wool trading. Other wool growing countries are initiating core test procedures, and the remainder may be forced to conform if continued large scale trading within the United States is contemplated.

Military Contracts Get FEPC Clause. Industrialists who seek contracts with the armed forces after July 1 must agree to a provision which prohibits discrimination against an employee or applicant because of race, creed, color, or national origin. The provision is contained in a new labor section of the Armed Service Procurement Regulation drafted by the three services and the Munitions Board (Note: This new regulation is in its final form, but could presumably be amended before it becomes effective.—Ed.)

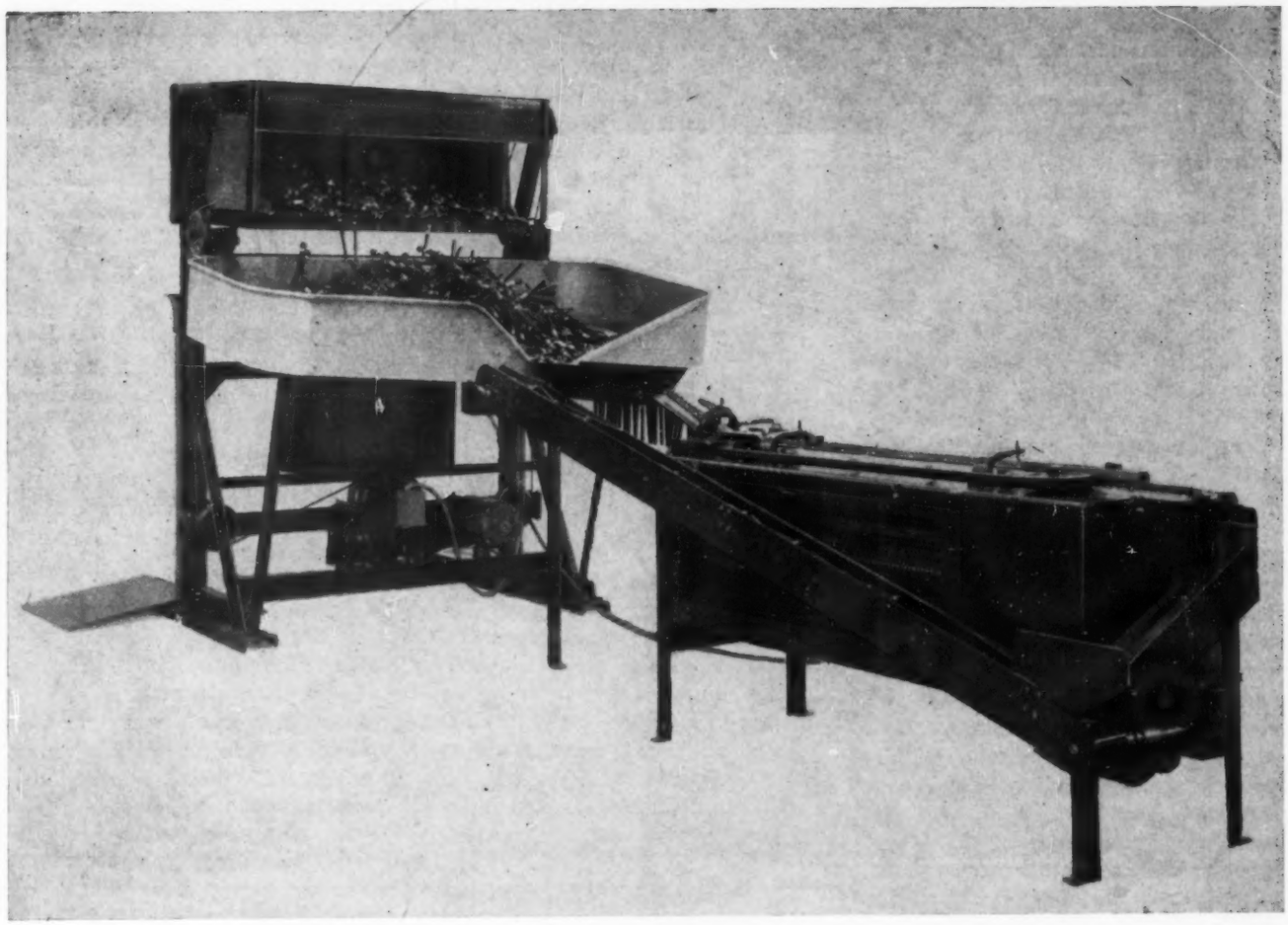
Business in Rural South. In the face of declining retail sales in large cities, outlying rural merchants and general stores in certain sections of the South report no reduction in business—some report increased sales. Reasons offered by rural merchants: Farmers do not go to town as often as formerly and now spend money at local stores; farmers and rural employees are returning to the merchants who customarily gave them credit through the years—and from whom they will expect credit in slack times.

Union Reasons for Textile Slump. It is reliably reported from several sections of the country that union men are spreading in textile communities their interpretation of the textile slump: Cutters and sewers, who are organized, refuse to work on goods manufactured in non-union textile plants.

Offer to Take Wage Cuts. Instances are known where both officials and employees have offered to accept wage reductions in order that plant operations may be resumed. It is reported that one Tennessee mill resumed operations under these conditions.

CONVENTION ACTIVITIES

In addition to getting executives away from their desks for a day or so, textile conventions offer the possibility of informal discussions with other mill men and suppliers to the industry. This group of mill executives and suppliers relax between business sessions at the Alabama Cotton Manufacturers Association meeting in Biloxi, Miss. (story on page 119).



The New Type L

HAS EXCEEDED ALL EXPECTATIONS

in efficiency and economy

Users are extremely well pleased with the total production of the new Type L and the complete elimination of damage to quills. It accommodates a wide range of yarns . . . including continuous filament, wool and worsted, and many counts of cotton and spun rayon.

The new Type L is designed to handle a wide variety of quill designs and sizes. It removes waste mainly by air jets and brushes . . . neither quills nor the finish of quills can possibly be damaged.

We also furnish conveyors and hoists for handling quills around our machines and moving them to another location in your plant. The RETURN CONVEYOR shown above is one more Terrell accomplishment to reduce handling costs and provide more efficient operation.

Our engineers are experts on bobbin cleaning and handling problems. Upon request, they will be glad to explain our equipment which provides minimum bobbin cleaning costs.

Additional information will be furnished promptly, upon request.

The TERRELL COMPANY, Inc.

CHARLOTTE, N. C.

AN

EXECUTIVE VIEWS

THE NEWS IN TEXTILES

Prepared by a man who is closely identified with the textile industry.

Textiles have a constructive story regarding wages and benefits. Tell this to employees and the public.

AS THIS is written, the latest figures of the Bureau of Labor Statistics show that in January of 1949 cotton mill employees in the United States were working an average of 36.3 hours per week for an average hourly wage of just over $1.12. To those who have been connected with the industry for many years, these figures call up dim memories of the years prior to 1915 when mill employees got something like 15 cents an hour, when hours of employment were long and when most companies were barely able to scrape together enough money to pay the taxes and the help.

We believe that all segments of the textile industry are proud of the record which has been made. Similar comparisons can be made for mills operating on synthetic fibers and woolens, but the wage raise in cotton goods is probably one of the most spectacular in the nation.

Those of us who work in the industry have a sound, constructive story regarding wages which we can tell to our employees and to the public. It is a story which should be told over and over. It cannot be told too often. It should be told in the terms of the individual plant, not in a spirit of boasting but rather as a means of demonstrating what management and employees can do when working together. The John Doe Manufacturing Company needs to remind its employees every few months that wages come from productivity and efficient supervision and that neither promises nor boasts nor big words can raise wages unless management and employees are working together to make a better product at a lower cost.

Fringe Benefits

Too often in telling this story of wages we forget the many advantages which accrue to textile employees in the form of fringe benefits. It is difficult, if not impossible, to reduce these benefits to a simple cents-per-hour basis. They are just as tangible, however, as money in the hand and all of us who work in the industry know this even though we may sometimes forget about it.

Some of the fringe benefits are: vacations with pay, various types of insurance, and company housing.

Such additional fringe benefits as pay for reporting in when no work is available, shift differentials, bonuses and severance pay add still other advantages to the many now enjoyed by mill employees. The free use of swimming pools in some communities, YMCA's, baseball diamonds, etc., are less tangible but are, nevertheless, attractive features of textile employment.

Carefully considered estimates as to the cost of providing such things as insurance, vacations with pay, etc., indicate the dollar and cents value of these benefits and show graphically that a mill statement of average hourly earnings, as favorable as that may be, does not tell the entire story. One mill executive recently indicated that the cost of providing these fringe benefits ran into more than 7.5 cents per hour per employee. Inquiry among several other manufacturers showed no estimate lower than 3 cents an hour per employee.

The radios, washing machines, and electric refrigerators in the homes of today's textile employees and the automobiles parked in front of mill homes indicate in a concise and literal way how far this industry has come in the years which lie behind us. These facts are so evident to all of us who work in the industry that sometimes we have a tendency to forget that other people need to know the story, too.

June 16-18—Annual convention, Southern Textile, Association, Mayview Manor, Blowing Rock, N. C.

July 28-30—Cotton Research Congress, Dallas, Texas.

Sept. 22-23—Annual meeting, National Association of Cotton Manufacturers, The Marshall House, York Harbor, Maine.

Oct. 12-22—"Textile Recorder" Machinery, Accessories, Yarns and Fabrics Exhibition, Belle Vue, Manchester, England.

Oct. 13-14—Annual meeting, North Carolina Cotton Manufacturers Association, Carolina Hotel, Pinehurst, N. C.

October 13-16 — National convention, American Association of Textile Chemists and Colorists, Chalfonte-Haddon Hall, Atlantic City, N. J.

Oct. 24-28—37th National Safety Congress and Exposition, Stevens Hotel, Chicago, Ill.

Oct. 27-28—Annual meeting, Carded Yarn Association, Sheraton-Bon Air Hotel, Augusta, Ga.

Nov. 3—Annual meeting, Cotton-Textile Institute, New York, N. Y.

1950

May 8-12—American Textile Machinery Exhibition, sponsored by National Association of Textile Machinery Manufacturers, Atlantic City Auditorium, Atlantic City, N. J.

Oct. 2-7—16th Southern Textile Exposition, Textile Hall, Greenville, S. C.

DAYCO RUB APRONS

INSURE MORE UNIFORM RUBBING

Created to perform better . . . last longer . . . thru Dayco Textile Know-How

Take another look at this Dayco Rub Apron. It's made of special synthetic rubber . . . man-made and controlled to do many wonderful things. It has a greater coefficient of friction . . . helps you produce more uniform yarn with proper density . . . and more yarn per machine. Its surface never becomes slick, is not affected by the abrasion of constant rubbing. Its long-wearing surface is not affected by humidity or temperature, never generates static, speeds up condenser action, and does not absorb color pigments from dyed wool.

Built to stand constant flexing, Daycos are easy to adjust and "stay put". They reduce eccentric motion, speed up condenser action . . . give you lower maintenance costs, with fewer shutdowns. For rub aprons that last longer, write: *The Dayton Rubber Company, Textile Division, Woodside Building, Greenville, South Carolina.*

Dayton Rubber

SHORTS and REMNANTS

Publishers, A Modest Crew

At the last Southern Textile Exposition, it was interesting and thought-provoking—well, provoking anyhow—to visit the booths of the various publishers of textile papers. Each had its slogan: "The Best"—"The Oldest"—"Most Circulation"—"Most Influential"—"Most Widely Read"—etc, etc.

Yes, sir! Say what you will, but us publishers are a modest lot; shrinking violets, that is.

◆

"Waste" Goes Abroad

". . . would respectfully ast you for copy of your special prints of wastage and losses . . . (Crawford's waste story from October '48) . . . being a spcialist inall textile mattere and specially regarding the questions dealt with in your article . . ."

NAME WITHHELD

(Just what we've been waiting for—a "spcialist inall textile mattere." Maybe we picked the wrong man to write our waste article, but from the response in this country, we'd say Crawford hit the nail on the head. Reprints of the 19-page story on waste available.)

◆

Likes Lab Article

". . . have read with interest 'The Laboratory Function' by John Middleton in April issue. More articles like this would help to educate . . . toward getting the most service and help from the laboratory."

W. P. COFIELD, JR.
Chief Testing Engineer
Callaway Mills Company
LaGrange, Georgia

◆

Heat Exchanger Story Registered

". . . feel that your associate editor, Hunter Hughes, should be congratulated on a very clear and comprehensive article [Heat Exchangers Pay Dividends — April '49] . . . should be of benefit to some top officials in the textile industry."

E. G. SIMS
Vice-President
The Sims Co., Inc.
Erie, Pa.

◆

Rush Call for 1941 Article

A long-distance telephone call from a South Carolina textile man had the article "Point System Grades Spun Rayon" to him as quickly as possible. At the time we were in the throes of moving—telephone here, desk there, files yonder—but eventually we all got together and he got the article.

Nomenclature

". . . read with interest 'Removing Rust from Loom Reeds' [Feb.] . . . what is meant by Oakite compound No. 36 . . . we remain, dear sirs."

Veenendaalsche Stoomspinnerij & Weverij
Veenendaal, Holland

(The February issue on Modern Production brought inquiries from all over the country. Foreign inquiries usually arrive about three weeks later.)

◆

Rise and Growth of Textiles in the South

"Will you please send me any information which you might have in regard to the rise and growth of the cotton textile industry in the South."

J. J. NORTON, JR.
Treasurer
Gaffney (S.C.) Mfg. Co.

(Our July 1948 issue gives good picture. Other information available.)

◆

Reprints Desired

". . . appreciate your sending us about 12 reprints . . . 'Training of Looper Operators' in April issue."

LLOYD L. LIVELY
Alabama Hosiery Mills, Inc.
Decatur, Ala.

(Little has been published on the subject of looping. Watch for the series in our knitting section.)

◆

Pardon Our Martingale

"We call your attention to publicity item No. 203 on page 220 of your March issue. You will note you have set us up in the 'Bolting' and 'horse' business.

J. J. De MARIO
Manhattan Rubber Division
Raybestos-Manhattan, Inc.
Passaic, N. J.

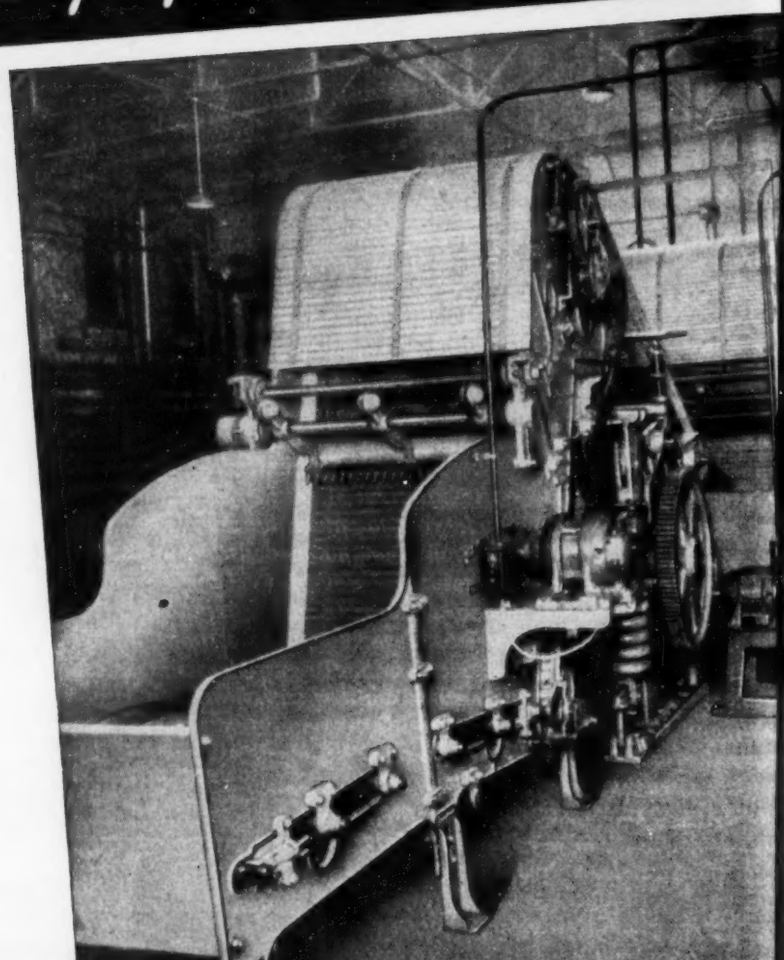
(Well, bless our bridle and bit, it should have been "belting" and "hose.")

WATERPROOF AND IN COLORS

"Don't worry, folks, my pretty pants are waterproof," captions Monsanto Chemical Company for the youngster. Fabric coated with vinyl butyral plastic, the pants are available in delicate pink or blue dressed up with lace and bows. They are manufactured by Archer Rubber Co., Milford, Mass.

SARGENT'S
CONTINUOUS – AUTOMATIC EXTRACTING MACHINE

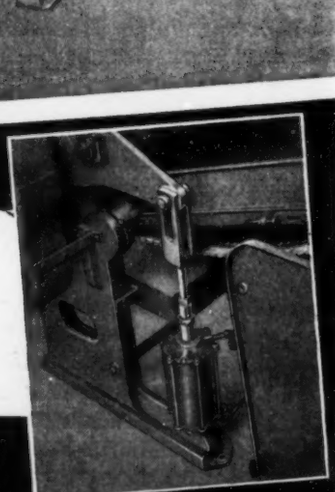
Reduces drying costs to a minimum



TODAY'S MODERN EFFICIENT METHOD

The SARGENT "CONTINUOUS" EXTRACTING SYSTEM *is saving thousands of dollars for many woolen, worsted and cotton mills. It employs an Automatic Feeder, the Extracting or Squeeze Roll Machine, and a Stock Dryer. This method of removing surplus dye, bleach, or scouring liquor from wool, staple rayon fibres, shoddy, mixed fibres, cotton and cotton linters, before drying, offers many distinct advantages,*

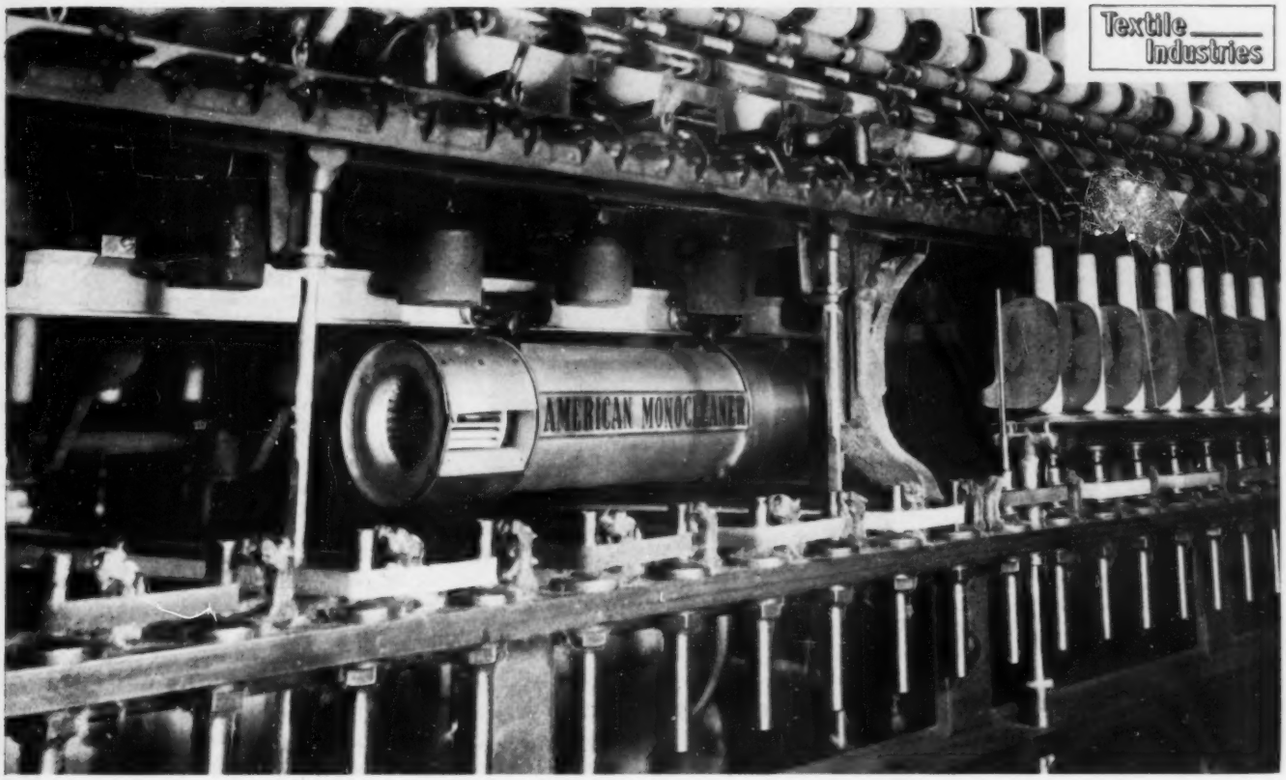
- One-man operation, with capacity up to 2,500 pounds per hour.
- Machines made in five widths for varying plant requirements.
- Even and continuous flow of material into and through the dryer.
- Uniform drying results—Savings in power—savings from continuous action—savings in labor, with ease of operation.
- Greater speed of operation, with least danger hazard.
- Stock is better conditioned, containing fewer "bunches." Eliminates most of the usual matted condition of stock coming from a hydro-extractor.
- Pneumatic load lift, with pressure control. Approximately 10 tons pressure between rolls.
- Direct motor drive. Spherical roller bearings on the squeeze rolls.
- Rugged construction. Trouble-free operation.



Detail of the Pneumatic Load Lift

C. G. SARGENT'S SONS CORPORATION

GRANITEVILLE, MASSACHUSETTS, U.S.A



With one section of the ringrail and spindles removed, this photo clearly shows how the underframe cleaner is positioned on the spinning frame. The unretouched photo was made after the cleaner had run for one month. Note that the underframe cleaner cleans underneath the frame only—not the outside. Lint outside the frame must be cleaned by hand or brush. Oily and greasy lint and loose ends of yarn are not removed by the underframe cleaner.

The New Underframe Cleaner

Staff Prepared

EXCLUSIVE

A CAROLINA cotton mill which manufactures low numbered yarn for weaving purposes has installed a device underneath the greenboard or deck and immediately above the cylinder on spinning frames which prevents the accumulation of lint and "streamers" under the frame.

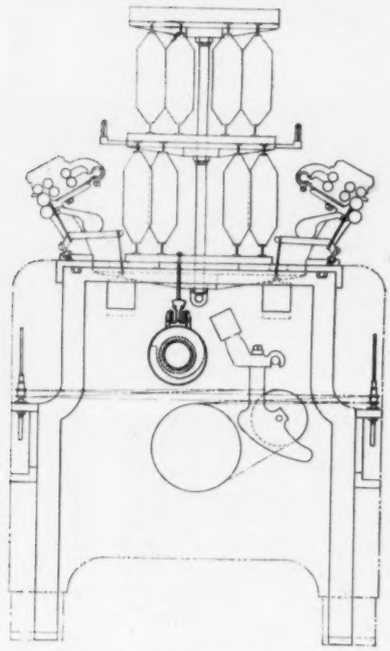
The equipment, termed the underframe cleaner, travels on a single electrified track from one end of the spinning frame to the other, delivering a stream of air which blows the lint from under the frame and onto the floor of the alley, where it collects in rolls or balls to be swept up easily by the sweeper.

Although the installation on more than a score of frames in this Carolina plant has been in too short a time to gather concrete production data on ends down in spinning and breakbacks in spooling, it is known by the management of the mill that improvement in cleanliness under the frame is well worth the undertaking, and furthermore preliminary tests made in developing the equipment lead both testing mills and the equipment manufacturers to believe that the new cleaner would be highly acceptable to the textile industry.

Return on Investment. As far as cleaning is concerned, and without taking into consideration the improvement in quality work, it is already known that a substantial saving can be made in cleaning labor. The mill that has installed the underframe cleaner used several men on the three shifts to clean the frames; engineers of the equipment manufacturers believe that at least five-sixths of this labor can be dispensed with.

No claim whatsoever is made at this time either by the mill or the equipment manufacturer as to the effect of the underframe cleaner on production and quality, and though no figures will be given here on preliminary test results, the figures on decrease in ends

This frame, which represents normal conditions in the mill studied, is blown out by air hose every four hours. Note streamers on frame. These are often blown off and carried into the yarn.



Elevation of spinning frame, showing location of underframe cleaner.

down in spinning and decrease in breakbacks in spooling have been reviewed—those figures can be classified as substantial in the language of any mill man.

Only the future will bring out other factors and results from the use of the equipment, either favorable or unfavorable. However, one man who has reviewed some of the "black card" tests on yarn made on frames both with and without the cleaner, advises that he is able to pick out the yarn from frames equipped with the underframe cleaner without any difficulty—there is said to be that much difference.

If the equipment proves itself on a production basis then it is obvious that in addition to quality improvement, there will be a reduction in fire hazard, floor sweeping will be easier, savings will be made in cleaning, and there will be a reduction in down time for cleaning purposes.

The accompanying photographs show how the equipment is installed on the spinning frame. However, it is interesting to note that The American MonoRail Company, which developed the equipment and tested it at several well-known textile plants, points out that it is solely to be used for cleaning under the frame and not for cleaning the outside of the frame. It definitely prevents the accumulation of streamers or loose bunches of fly which may be blown into the yarn.

The company makes known that the traveling blower does not remove yarn which becomes attached to the under parts of the frame, nor does it remove lint which affixes itself to the parts in a heavy accumulation of oil. It is strictly a cleaning device for loose lint, operating in principle along the same lines as the company's overhead cleaner for spinning rooms and card rooms.

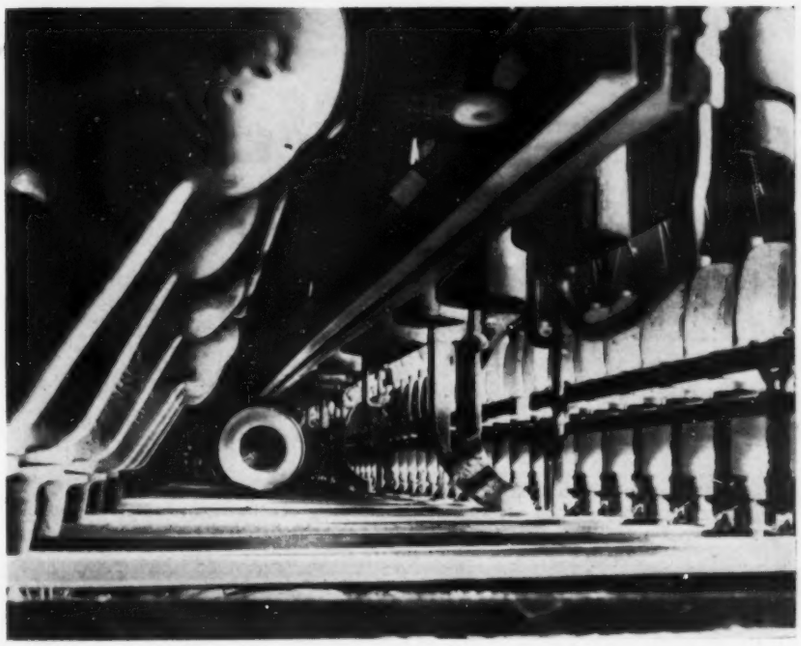
Description of the Underframe Cleaner. In developing the equipment, the problem was to obtain a unit which would deliver adequate air velocity and volume and yet be of sufficient compactness to operate in the very restricted space over the cylinder and between the belt tighteners and roll tension weights. The resulting unit is cylindrical in shape, some three feet in length, and only six inches in overall diameter.

It delivers two high velocity, rotating and traveling streams or jets of air (one on each end of the unit) obtained from an electric motor-driven unit suspended from and running back and forth on a rail extending the entire length of the spinning frame. The rail is attached to the main frames directly over the spinning frame cylinder.

The unit consists of a single motor driving two fans, a tractor for moving the unit on the rail, and a fan housing rotation gear. The motor is equipped with a double shaft extension, one end simply carrying a fan and the other passing through a unique driving unit and then having the second fan mounted on its extreme end.

The fans are the centrifugal or turbo type which, when equipped with proper scroll or housing, will deliver a high velocity stream of air at right angles to their axis of rotation. The fans are equipped with such a scroll type housing; however, these housings slowly rotate so as to direct the air to all parts of the underframe from the floor to the underside of the greenboard or base board. Thus, while rotating and also traveling the length of the frame, they reach and clean all parts of the underframe.

The gearing for traveling the unit and for rotating the fan housing is located in a compact, sealed case and operates in a fluid grease. In this same case is contained the mechanism for reversing the travel direction of the unit upon reach-



Unretouched photo showing condition of inside of spinning frame after one month's operation without hand cleaning or blowdown. The problem in designing the underframe cleaner was to develop a unit which would develop a sufficiently strong jet of air to do the necessary cleaning job, yet fit into the limited space available on existing spinning frames. The unit may be used either with or without a lint screen over the impeller. If the frame throws oil, lint clogs the screen, making installation without screen necessary. Usually the draft from the spinning tapes cleans the screen. Unit shown here has no screen, but impeller (fan) is cleaned at each end of traverse by jet of air which comes from copper tube (at right in photo). Air which cleans the impeller is turned on for about two seconds while the cleaner is at the end of the frame, and before it begins its return trip, thereby preventing accumulation of lint in the impeller wheel.

ing the end of the spinning frame. By using a mechanical reverse gear, the motor and fans operate continuously in one direction, thereby avoiding frequent reversal of the electric motor.

The tractor for propelling the unit back and forth on the rail is a direct development or outgrowth of the company's standard Mono-Tractor, which has long been used for traveling their ceiling cleaning blowers and standard overframe cleaners, as well as electric hoists and automatic dispatch carriers. Thus, it is simply a miniature MonoTractor with a 2½" diameter rubber drive wheel bearing against the underside of the rail which carries the entire unit. Slow rotation of this drive wheel travels the unit back and forth the entire length of the spinning frame.

Power. Electric power is obtained from the main frame drive motor junction box by means of an isolating transformer, which not only reduces the voltage to 110 volts single phase, but also completely isolates it from the main power source, making it "dead to ground." This single phase power is then carried through two wires to the rail, which is of a split or double section, the two halves being carried on insulating supports attached to the main frames of the spinning frame.

The trolley carrying wheels act as current collectors, taking the power by internal wiring direct to the electric motor. The electric motor is ⅛ hp of the split phase commutatorless type, equipped with sealed ball bearings which require no lubrication.

The entire unit is designed to operate without lubrication and a minimum of maintenance.

Wool Group Hears Senator O'Mahoney

Assembled at the Waldorf-Astoria, April 14th, more than 300 representatives of the National Association of Wool Manufacturers heard Senator Joseph C. O'Mahoney urge business to continue underwriting the "tremendously expensive programs" of government during these "times of great crisis."

Senator O'Mahoney, long-time congressional spokesman for wool growers, declared "We can save the world from totalitarianism if only we had the will and wit to make the capitalistic system work." Russians, he claimed, are waiting for the disintegration of our economy. The Russians don't have to promote a war. They believe that "leaders in America don't have the cohesion to prevent economic disaster."

The Senator emphasized that industrialists have not learned how to prevent depression. "There are men in business who resent government taking a hand in preventing a depression," he said.

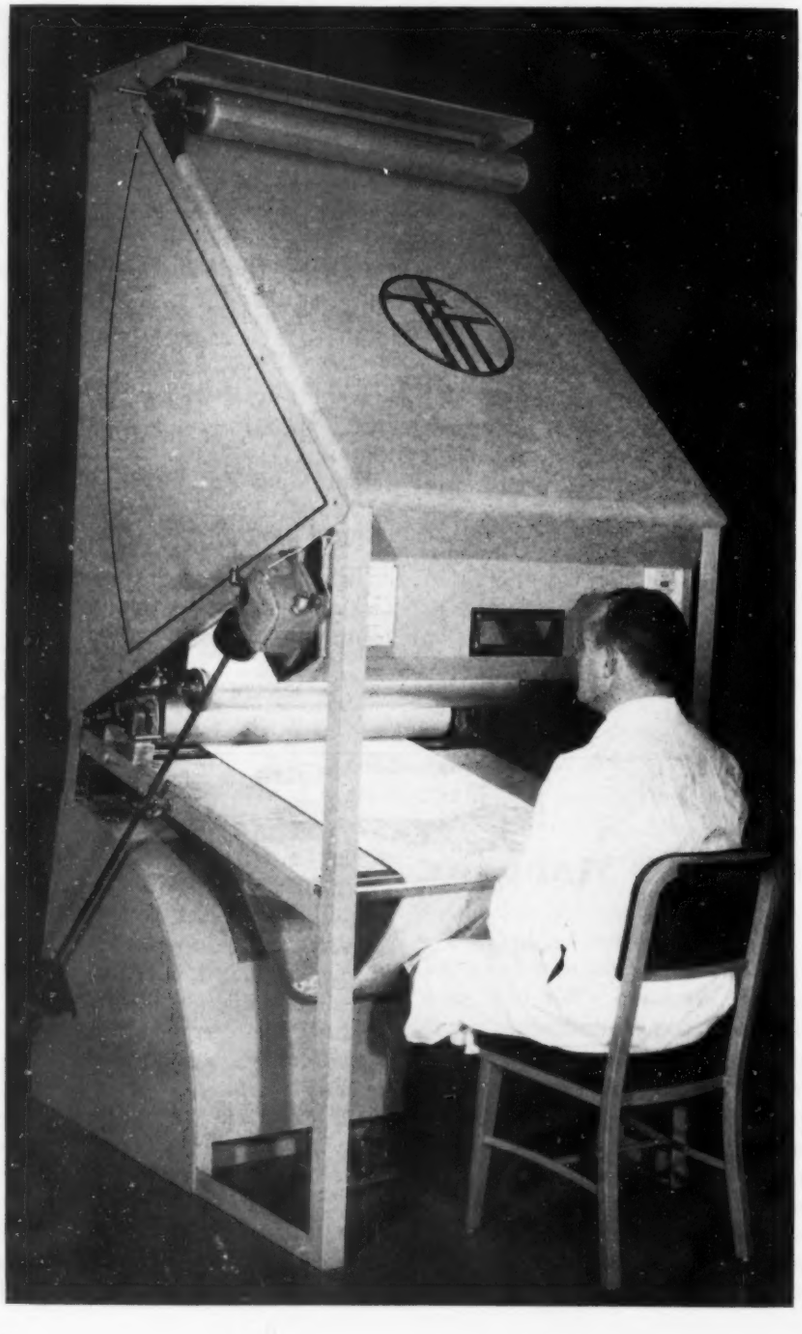
Citing the high peaks of business activity and rise of income from all persons employed in February 1949, Senator O'Mahoney called upon business and government to coordinate and secure America's high standard of living. Government planning, he said, is not designed to control industry, but to prevent collapse.

Cloth Inspection Machine and

Staff Report

ON THE OCCASION of the annual meeting of the board of directors, the Institute of Textile Technology, in Charlottesville, Virginia, announced the development of two new machines to aid the textile industry. One of these is a new cloth inspection machine conceived and developed by Jack Owen, of the Institute's mechanical engineering department, and the other is a Uniformity Meter to test the evenness of yarn, roving, or sliver. This test equipment was designed and developed under the direction of Dr. Edwin J. Bernet.

I T T inspection machine which shows the operator a series of stationary images of the continuously moving cloth. Inspection is made much easier and accuracy is greater.



Inspection Machine. The new inspection machine permits an operator to view the continuously moving cloth as though it passed before her in a series of stationary panels. This permits easier and more accurate inspection. This illusion of a stationary panel of cloth is "all done by the aid of mirrors," but there is no trick to the better inspection and the resulting higher quality cloth.

Using this new machine, the inspector sits before it and views the cloth on a mirror. This mirror is not stationary, but tracks the moving cloth at such a speed that the cloth appears to be stationary. The inspector sees an area of cloth 18 inches long and the full width of the roll. The mirror then flicks back quickly to view the next panel of cloth going through the machine, this panel being similarly tracked by the mirror to provide a stationary image for the operator. The machine is provided with variable speed controls so that the stationary images move at a selected speed before the inspector's eyes. The speed of the cloth through the machine may be varied from 20 to 60 yards per minute.

In inspecting cloth as it passes over a conventional inspection screen, the inspector must make four movements with her eyes to cover the area of cloth passing before her. She must move her eyes up and down over the cloth, and she must move her eyes horizontally from side to side. While making these voluntary movements, the eyes involuntarily change focus as the point being viewed moves toward the operator, and the eyes

Uniformity Meter Built at I T T

also converge on the point as it approaches.

This new inspection machine, by providing a stationary image of a panel of cloth, has eliminated all but one of these movements: the movement from side to side. No vertical eye movement is required because the 18″ panel is narrow enough for the eye to take it all in at one time. Since there is no movement of the panel so far as the eye of the operator is concerned, there is naturally no change of focus or convergence.

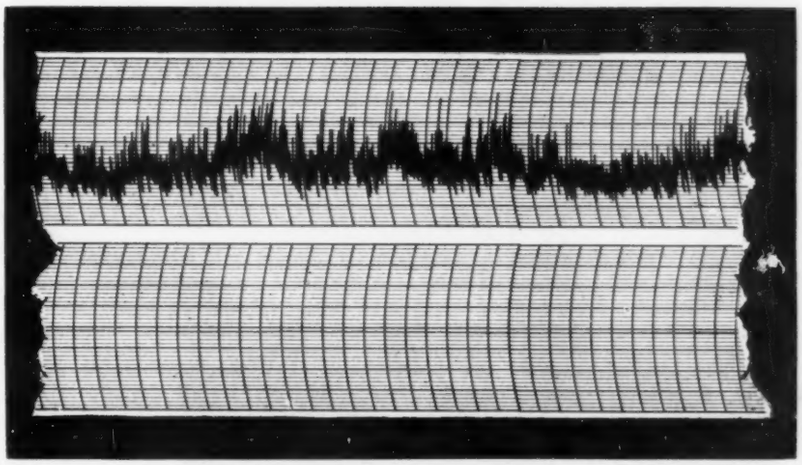
After passing before the mirror, the cloth comes out onto a platform directly in front of the operator. If any imperfections have been noted, the operator may quickly stop the machine by releasing pressure on a foot pedal and may make repairs or examine the imperfections further.

To date, the Institute has built only one of these machines, but it has been tested for six months in Callaway Mills, and results with it are reported to be excellent. Undoubtedly, contracts will be let to a manufacturer for construction of the inspection machine on a commercial scale.

Uniformity Meter. The Institute's new uniformity meter is more of a test device than a production machine, but there is reason to believe that it may be closely tied in with sliver, roving, and yarn production in the future. The purpose of the machine is to test any or all of these various strands of fibers for uniformity of structure.

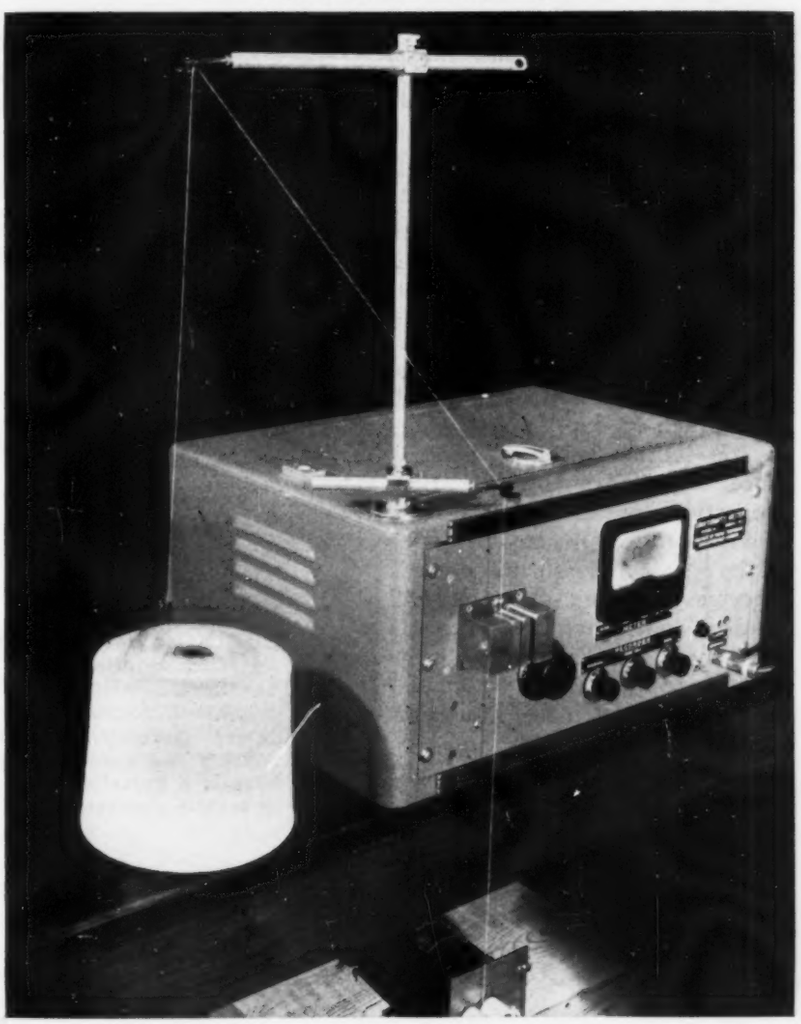
While most test machines designed to indicate uniformity use a silhouette of the yarn as the basis for rating it, this new device measures the weight of the fibers per unit length. This gives a true measure of uniformity which is not thrown off by a variation in hardness or fluffyness of the yarn.

(*Continued on page* 225)



Above, a section of graph record made by Uniformity Meter. High peaks indicate overweight yarn; low valleys, underweight.

Below, photo of the Uniformity Meter for measuring weight per unit length of sliver, roving, or yarn.



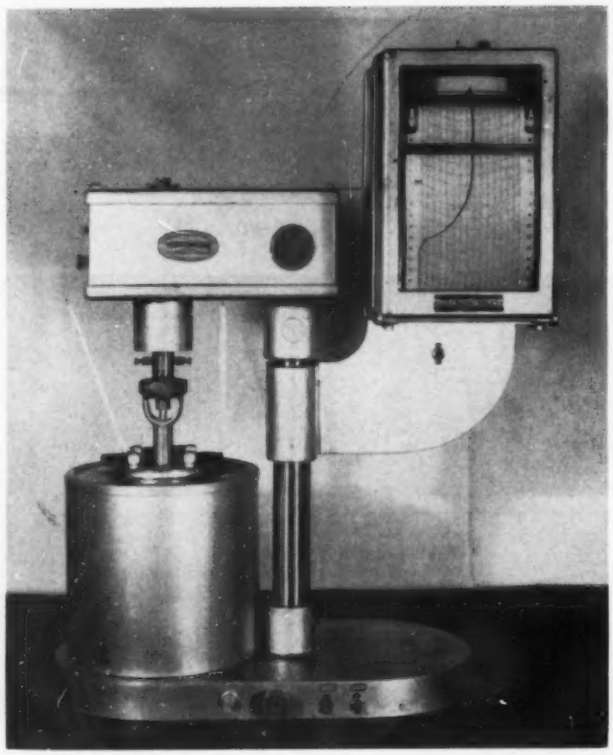
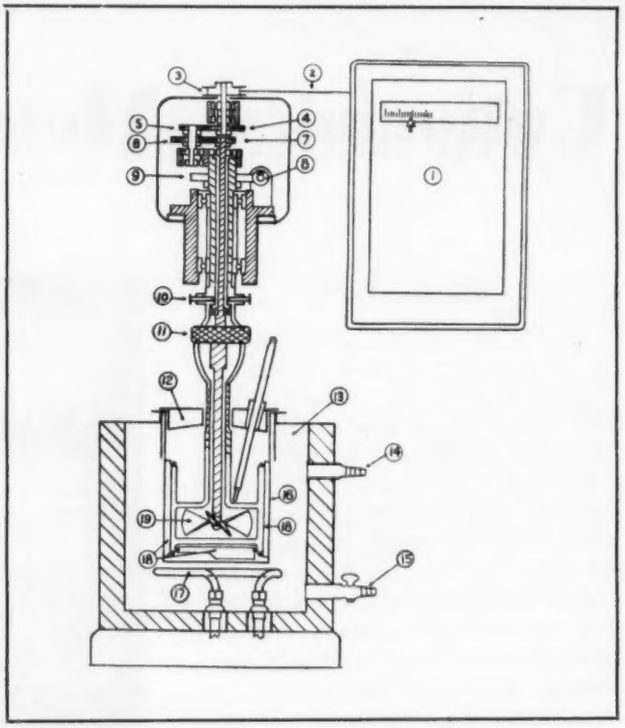


Photo of the Corn Industries viscometer. Variations in cooking procedures which cause errors in viscosity determinations are prevented through automatic control of rate of heating, maximum temperature, rate of stirring, and loss of water by evaporation. Viscosity is measured as the force which the paste exerts against a propeller driven through it at constant speed. A gear differential transmits the force to a dynamometer attached to the pen arm of the recorder.



Sectional drawing of the Corn Industries viscometer. (1) Recorder. (2) Cable from viscometer to recorder. (3) Cable drum. (4, 5, 6, 7) Gears of sun and planet differential. (8) Worm driven by synchronous motor. (9) Worm gear. (10) Spring pins for holding center shaft for coupling stirrer. (11) Coupling to which stirrer is attached. (12) Condenser and cover. (13) Water bath. (14) Overflow tube. (15) Drain cock. (16) Starch beaker. (17) Electric heater, 1000 watts. (18) Scraper blades. (19) Impeller.

Determining Starch Viscosity

By W. G. BECHTEL
Research Fellow
Corn Industries Research Foundation

EXCLUSIVE

DURING a recent "Symposium on Starch" sponsored by the Southeastern Section, American Association of Textile Chemists and Colorists, textile men in attendance displayed considerable interest in the discussion of a newly developed continuous recording viscometer for routine and research testing of starch products. Presented here is a description of the instrument and its application in textile processing.

AMONG the properties of starch which are important to users in the textile industry, none is more important than the flow properties or viscosity of the cooked solution. Successful application of starch to the various processes of sizing, finishing, and printing depends on control of the viscosity of the solution within the limits required by the equipment used, and to obtain the desired effect upon the yarn or fabric.

To meet the needs of different applications and of different operating conditions in various mills, a number of starches are available. From unmodified starch through various degrees of modification to the highly modified dextrins and gums, the products cover a wide viscosity range.

It has been the usual practice for many years to determine the viscosity of starch in the laboratory by means of efflux viscometers such as the Scott or Dudley, or with a rotational viscometer such as the Stormer.

One of the limitations of efflux viscometers is that an orifice can measure viscosity over only a lim-

ıted range, while the viscosity of the many starch products at a uniform concentration varies by a much wider degree. So it has often been necessary to test different starches at different concentrations. When this is done, the results do not give an actual comparison of the products.

Furthermore, a single viscosity test in any instrument at the end of an arbitrary period of cooking does not adequately characterize a starch since the flow properties of its solutions or pastes change continuously with cooking. Some starches may form pastes which are more viscous than others in the early stages of cooking, but which will thin out to a much greater extent on extended cooking.

A difficulty encountered in most procedures for testing starches is to get good agreement between duplicate tests. This is because the observed viscosity depends not only on the natural variety of the starch and its method of manufacture, but also on all steps involved in the procedure for preparing the paste for the test.

The moisture content of the "dry" starch must be considered, and the rate of heating and of stirring, the temperature to which it is cooked and the duration of the cooking period all affect the result. Unless these are closely standardized and controlled, tests cannot be duplicated and comparisons of viscosities of different starches may be entirely misleading.

Corn Industries Viscometer. Research sponsored by the Corn Industries Research Foundation has led to the development of a new viscometer especially for testing starches. It is known as the Corn Industries viscometer and it is available commercially. With this instrument starches can be tested in the concentration range of their intended use, and all conditions involved in cooking the pastes are controlled automatically so that tests are readily duplicable.

A continuous automatic graph is made of the viscosity during the entire cooking period. After the starch is cooked, it may be cooled to any desired temperature in the viscometer and the changes in viscosity during this process are recorded also. This is of especial advantage where the starch is to be stored or applied at a lower temperature.

Operation. In the Corn Industries viscometer the starch paste is cooked in a beaker heated by a thermostatically controlled water bath. The paste is stirred by a scraper and impeller which are driven at constant speed by a synchronous electric motor. The scraper has blades which touch the sides and bottom of the beaker, thus stirring the paste away from the walls, and aid in heat transfer and in maintaining a uniform temperature throughout the contents of the beaker.

The impeller serves to keep the body of paste stirred and to measure the viscosity. It is driven by the motor through a gear differential so that its motion is independent of the scraper. The force of the paste against the impeller is proportional to viscosity in poises, although it is common practice to give it in terms of torque units (gram-centimeters). This force is transmitted through the gear differential to operate a simple dynamometer in the recorder case. The pen of the recorder is coupled directly to the dynamometer.

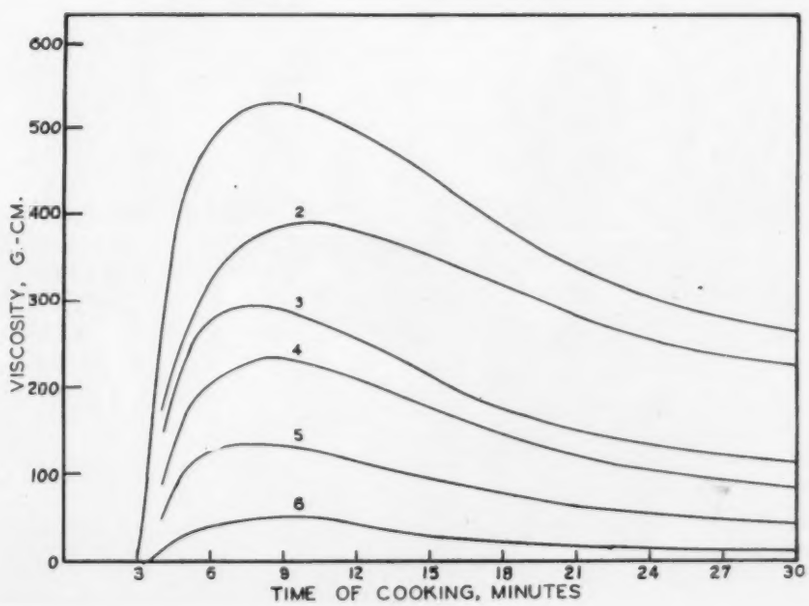
To make the viscometer sensitive in the region of lower viscosities around one poise and to give it a range to include highly viscous pastes, the dynamometer has four ranges which are even multiples of the lowest. The change from one to another can be made almost instantly with no effect on the standardization of the viscometer. In this way starches covering a wide range of viscosities can be compared directly at the same concentration.

Since the rate of heating, the final temperature and rate of stirring the paste are all controlled automatically, this method is free from the variations which sometimes occur when these factors are controlled manually. The viscosity measurement is made continuously during the cooking process so that it eliminates the need for transferring the starch from a cooker to a viscometer.

The graphs which are produced give viscosity as a function of time of cooking. They make permanent records which are easily filed away for future reference, and which aid in making the comparison of a number of starches a simple matter.

When starch is heated in water, the viscosity is essentially that of the water until the temperature

Change of viscosity of thin boiling corn starches cooked at 196 F at 9% concentration in the Corn Industries viscometer. These starches are all used for textiles. On longer cooking, the viscosity will fall somewhat but the relative position of the curves will remain the same. Curves 1 to 6 show starches of decreasing viscosity with increase in modification during manufacture.



rises to a point at which the starch granules swell rapidly. At this point the viscosity suddenly begins to increase and as the temperature rises it passes through a maximum, after which it falls more or less rapidly under the influence of heat and agitation.

The various kinds of starch products which are available for textile use differ greatly in the temperature at which swelling begins, in the rapidity and extent of viscosity increase to the maximum, and in the rate and extent of thinning out of the paste on long cooking. If they are cooled they likewise show great differences in the amount of thickening or viscosity increase.

The information about a starch given by the graph is much greater than that obtained in the usual viscosity test, although the time required need not be greater than that of cooking the starch and testing it by other methods. On the chart at the end of the test is a record of the time required for the initial viscosity rise and the maximum to occur. The viscosity at the maximum is shown as well as the extent of thinning out to the end of the test. A thermometer in the paste permits readings of temperature to be made at any time and these can be written on the chart.

Textile Applications. From the appearance of the viscosity curve it is possible to infer the nature of an unknown starch, and the extent of its modification during manufacture. By comparison with starches known to be satisfactory for a given textile operation it is possible to determine its suitability for use as far as the property of viscosity is concerned.

Representative of types of tests for which this new viscometer is well suited are studies of the effect of various adjuncts used in textile sizes, enzyme conversions, different pH values, concentration of starch, and temperature of cooking and of use. Since the viscometer can be allowed to run indefinitely, it can be used for studies of the effect of extended cooking.

The instrument is manufactured by Hayes Scientific Appliances, Urbana, Illinois.

Phi Psi Holds Annual Convention in Atlanta

Convention scenes. Upper left, M. Earl Heard, newly elected grand president, pays tribute to Prof. Edmond Camp (center), dean of the textile school at Alabama Polytechnic Institute, for his "splendid record of service" to the textile industry. At left is Fred Williams of Piedmont Cotton Mills, convention chairman.

Upper right, Harold C. Wood, retiring grand president, awards $100 to a delegate from the student chapter at Philadelphia Textile Institute for the outstanding exhibit of textiles. Second and third prizes were won by chapters at New Bedford Textile Institute and Georgia Institute of Technology, respectively.

Lower left, Cleveland Adams of Lanett, Ala., accepts charter for Chattahoochee Valley alumni chapter from Harold H. Hart, executive secretary and founder of the fraternity. Charter was also presented to Atlanta alumni chapter.

Lower right, a group of delegates from the active chapter at Clemson (S. C.) Textile School.

"Textile Industries" staff photos

Open Houses | Good Press Relations | Employee Publications | Community Recreation

Textile Industries **Presents**

A Working Plan for Achieving —

Good Public Relations

NOT LONG ago the chief executive of a national manufacturing concern called his advertising manager in and said: "Plan a campaign of advertising to get us good public relations!"

The man was sincere. And his very sincerity indicated a complete lack of understanding as to what good public relations is, what good public relations does, or how good public relations is achieved.

We must, however, give him credit for his awakening to the need for good public relations.

EXCLUSIVE

THE TEXTILE industry within the last several years has had its awakening to the value of good public relations; now the industry and many of its individual organizations are doing something about it. Progress has already been made on an industry-wide basis and in local textile communities, but the surface has only been scratched.

Achieving good public relations is not a job that can be accomplished overnight. It is a job that requires continuous operation—but the results can be well worth the effort.

Outstanding men in textiles are at present devoting their time, thoughts, energy and their financial support to programs which will build good public relations for the industry. To secure the results, which the textile industry so urgently needs, requires the effort and cooperation of each component part of the industry.

Suggestions and examples for improving public relations compose the subject of this special section.—The Editors.

Please turn page

Reprints of this special section may be secured by writing: Editor, TEXTILE INDUSTRIES, *806 Peachtree St., Atlanta, Ga.*

Radio Programs | Community Advertising | Courtesy | Industry-Wide News

Working Plan for Public Relations

Industry Needs to Report its Acts to the Public

INDUSTRY has experienced two distinct phases in its relations with the public and is now moving into a third.

The first was symbolized by the familiar accusation that business held to a policy of "the public be damned." The second phase was keyed to the policy of "the public be served."

The third is materializing in the policy, "the public be told," a policy aimed at acquainting the public with the fact that it is being served well.

If industry has adopted the new policy too late, the tragic consequences will be heightened by the fact that nowhere in the world is the public better served by business than in the United States, and nowhere in history can be found the degree of political and personal freedoms which industrial democracy has gained for the people of this country.

Public Relations and Business Costs. Evidence abounds that the socialistic trends of today are due largely to the public's misunderstanding and misinterpretation of business and industry. Yet, there is still a tendency in industry to regard "public relations" as a luxury or a new-fangled frill, and as something that can be turned on or off like a water faucet.

There are still executives who fail to see any connection between public relations and the cost of doing business, even though today they are paying a heavy price for the results of poor public relations as reflected in restrictive legislation, excessive taxation, labor troubles, public suspicion of business, and public indifference to industry's problems.

Public Relations Ever Present — Wanted or Not. Encouragement is found, however, in the increasing numbers of business and industrial leaders who are now well aware of the fact that every business and every industry has public relations at all times, whether they want it or not, and that there is no such state as no public relations.

FREEDOM COMES FIRST

Free right to do business depends on public's knowing that business is fullfilling its obligation to society.

The public has come to expect industry to do more than make goods, but does not know all that it is already doing beyond that.

Public relations is a matter of good will, good acts, and telling the public about them.

Socialistic trends can be traced to public's distrust and misunderstanding of business and industry.

Every industry always has public relations—good or bad—because people are forming opinions continuously.

Industry is getting a late start in new era of public relations but has two reasons to hope for success.

More and more executives are learning that a company or an industry has either good public relations or poor public relations, and that the kind of public relations one has does bear directly on the cost of doing business and, in fact, is the very future of doing business at all.

Public Relations Defined. No doubt the slowness with which the connection between public relations and "practical matters" has been recognized is due in large part to confusion over the term. It is a poor label. To some it means something mysterious and tricky, to others something frivolous and expensive, and to still others it is only a wispy theory floating in the wind.

The accompanying box offers one definition of " public relations." The third part is especially important in these days when so much propaganda is being circulated to discredit business as being devoid of good will and good acts. If this propaganda is to be counteracted, an even greater flow of factual information must somehow reach the public.

Unfortunately, good deeds do not become known by themselves. A planned effort is needed to bring them to the attention of the public and in such a way that people will understand that their own personal welfare depends directly upon the welfare of business and industry.

A DEFINITION OF PUBLIC RELATIONS

By one definition, public relations is made up of three parts:

1. **A desire to show good will to others;**
2. **Translation of that desire into acts of good will;**
3. **Reporting the acts of good will to the public.**

Public's Opinion on Industry's Obligation. Many surveys of public opinion have shown that the public feels very strongly that business and industry have definite obligations to society over and above those of paying good wages and turning out good products and goods. Among the most widely circulated recently is the survey conducted by the Bridgeport, Conn., Chamber of Commerce which revealed quite a list of things the residents of that town felt its business enterprises should be doing in addition to making goods.

Business is actually doing many of the things that the public expects it to do, but the public doesn't always know that. Business needs to report more on how it is fulfilling its obligations to society.

How Public Opinion Forms. Public opinion plainly is the collective opinions of many individuals. Individuals form their opinions mostly on second-hand information—on what they read in the newspapers and maga-

zines, by what they hear over the radio, by what someone else tells them.

They seldom see the object or person about which and whom they have opinions.

For example, there are millions of people throughout the country who have never seen a textile mill or a textile executive but who have opinions about both.

There are members of state legislatures and the Congress of the United States who have never been inside a mill and who have never met a mill executive or mill employee, but who vote for or against laws which vitally affect the textile industry and all of the people who gain their livelihood in it.

A common sense assumption is that any opinions prevailing today which are unfavorable to the textile industry were formed on the basis of impressions gained mostly from reading and hearing. It is therefore a reasonable assumption that the best way to change this opinion is to use the same channels through which the opinions were formed in the first place.

Thus, the practice of public relations uses all of the available means of communication — news stories, magazine articles, photographs, information booklets, radio programs, exhibits of various kinds, the public platform. Where the practice of public relations operates in the field of community and employee relations it also can make use of first-hand observation through such methods as plant visitations and the "open house."

Measuring the Benefits of Public Relations. The consequences of poor public relations always seem easier to measure than the benefits of good public relations. One reason is that one of the chief benefits of good public relations is the absence of trouble.

But, the benefits of good public relations can be measured, too. One of the first signs of improving public relations is a responsive attitude on the part of the press. An increase in the volume of matter being printed in the newspapers and magazines about a company or an industry is both the direct and indirect result of an effective public relations program. The same yardstick can be applied to the radio.

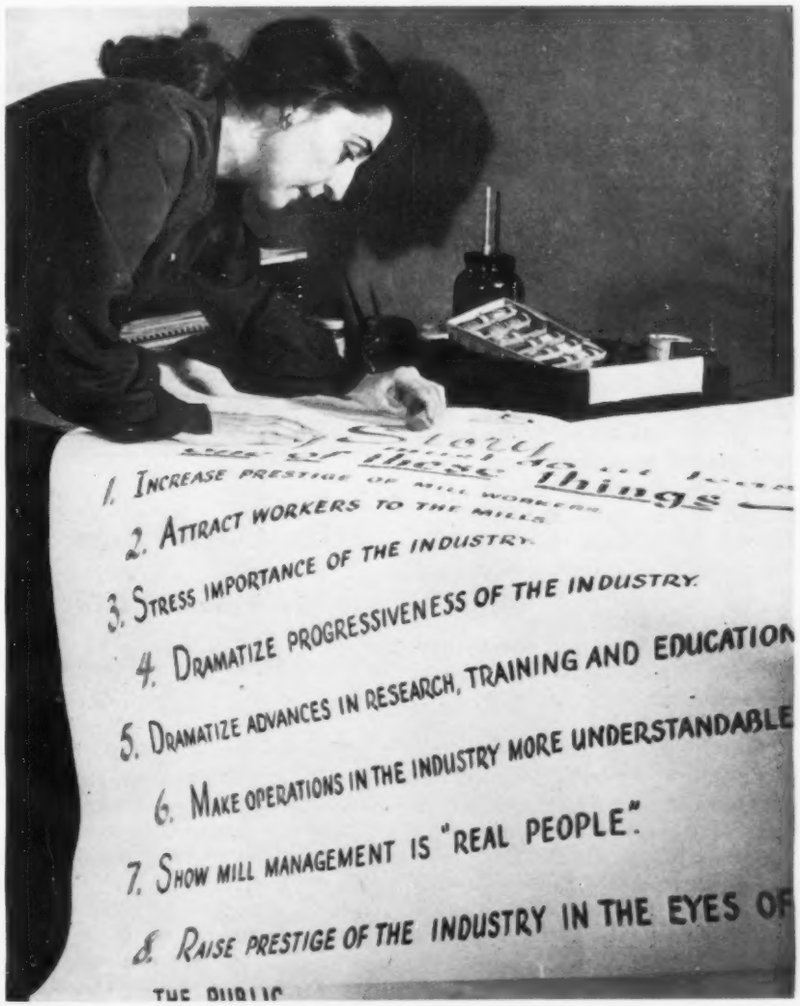
A more understanding attitude on the part of lawmakers, which is reflected in more reasonable legislation, less regulation and fair taxation, also can be noted when an industry's public relations are on the mend.

Another yardstick is the public's attitude towards a public administration, whether it be city, state, or national. If the public supports administrations which seek to restrict and penalize business, obviously the public plainly distrusts business or at least does not understand that personal interests and industrial welfare are interdependent.

As and if the public gains new confidence in business, it will not tolerate socialistic measures that are damaging to business.

Basis for Hope. Two great hopes stand out in this third era of industry's relations with the public. The first is the growing realization by industry that the public is continuously forming opinions about it and that every industry therefore always has some kind of public relations wheth-

One phase of public relations is reporting the acts of good will to the public. Results of an industry-wide program are being listed by the artist in this picture. The textile industry has a sound story to tell—getting the story known is the job.


1. INCREASE PRESTIGE OF MILL WORKERS
2. ATTRACT WORKERS TO THE MILLS
3. STRESS IMPORTANCE OF THE INDUSTRY
4. DRAMATIZE PROGRESSIVENESS OF THE INDUSTRY
5. DRAMATIZE ADVANCES IN RESEARCH, TRAINING AND EDUCATION
6. MAKE OPERATIONS IN THE INDUSTRY MORE UNDERSTANDABLE
7. SHOW MILL MANAGEMENT IS "REAL PEOPLE."
8. RAISE PRESTIGE OF THE INDUSTRY IN THE EYES OF

er they be favorable and beneficial or unfavorable and harmful. The other hope is recognition of the need to make good acts known to the public lest they be lost in the flood of propaganda which is fed by and in turn feeds ignorance and prejudice.

Industry has started late in its new conception of its relations with the public. Vast areas have already been lost. But they can still be won back if industry is now fully aware that even more important than production, sales, and other factors of doing business is, first of all and above all, the need for a free opportunity to do business.

Elements and Methods of a Company Program

PUBLIC RELATIONS begin at home, and no company is so self sufficient that it can afford a poor standing in its own community in these days of growing public scrutiny of the corporate conscience.

The company that has incurred ill will in the community is beset by a variety of difficulties, including even such dollar-and-cents penalties as declining production through lowered employee morale. No one likes to work in a place that is poorly thought of by his friends and neighbors.

Conversely, the company that earns recognition as an asset to the community reaps direct and indirect benefits that help to smooth the path of doing business.

The kind of program that helps a company attain this standing is built upon good will and acts of good will. A mere publicity campaign may capture public attention momentarily but it cannot succeed for long alone.

Good acts, therefore, are the first element of a successful company program. Then there must be two main channels of communication, one with the community and one with the company's employees.

Obviously the group of people most important to any company is its own employees, not only in relation to the internal affairs of the company, but also for the extent of their influence in shaping public opinion out through the community and even beyond. What a community thinks of a company is affected greatly by what the company's employees and their families say about it in their contacts with other residents of the community.

The next large group of importance to any company is made up of the community's residents. Within this group, of course, are the smaller groups of civic leaders, educators, and other opinion influencing individuals.

The steps of procedure which have worked out most satisfactorily in developing a company public relations program begin with an appraisal of existing conditions. The purpose is to spot both the good and the bad; to determine what the company is doing that is well received by the employees and the community; what it may be doing that is not well received or at least not understood; what other needs it might well be serving.

Having made its appraisal and selected the needs, the company is ready to act through any of the following described methods, all of which have been tried and proved repeatedly in practice.

THE COMPANY PROGRAM

A poor standing in its own community hurts any company.

Good will and acts of good will are first requisites of a successful company public relations program.

Publicity won't do it alone.

Proved activities and projects are available for earning a good standing and practicing the axiom, "Public relations begin at home."

Methods include:

1. **The "open house."**
2. **Good press relations.**
3. **Radio Programs.**
4. **Employee publications.**
5. **Community advertising.**
6. **Good neighborliness.**
7. **Health and cultural programs.**

1. The Open House

Mill Executives Relate Experience with "Open House" Programs

"PROBABLY, the most effective way to win friends and better understanding in a community is to hold a well planned open house."

This comment of a textile executive who tried it is typical of conclusions reported by officials of a half dozen companies.

The key to success lies in the words—"well planned." Yet, study of a number of operations indicates all follow a pattern, though they vary in details, and that the planning is a comparatively simple matter for companies of any size.

Public Interest. A question raised frequently is:—"Would people be interested in visiting our plant?" Both polls and experience indicate they

OPEN HOUSE REWARDS

WHY?

Benefits of holding an "open house" are:

1. **Gives townspeople better understanding of company's importance to community.**
2. **Makes company better liked in the community.**
3. **Counteracts any unfair propaganda that has developed in the past or that might be circulated.**
4. **Stimulates employee pride and morale; helps operating efficiency.**
5. **Generates desirable publicity.**

HOW?

1. **Planning is key to successful "open house."**
2. **Allow plenty of time for preparation.**
3. **Select purpose of the event.**
4. **Route of tour is important.**
5. **Guides need coaching.**
6. **Arrange for refreshments, parking, etc.**
7. **Let employees demonstrate work.**
8. **Exhibits and inexpensive gift packages are popular.**

would be. The Bridgeport Chamber of Commerce, in a poll it sponsored, found 69 per cent of citizens questioned wanted to visit Bridgeport plants. A South Carolina mill planned for a maximum attendance of 2000 and had 2200 visitors—a usual experience.

To see exactly how an open house is planned, let's follow the executives of one mill from initial planning until the last visitor leaves.

Planning the Open House. First, purpose of the open house was determined and put in writing—a practice which provides a central theme around which the program may be built. In this case, the mill sought to improve morale of employees and better acquaint the city and county about the plant. Opening of a new office building provided a timely reason.

Another mill planned an open house to acquaint the local public with new products it was introducing, and another used this method to eliminate community misunderstanding of a company policy.

Next a date was set. Care was taken to allow plenty of time for preparation (two months in this case), to avoid conflict with other community events, and to dovetail best with production.

As the term "open house" is sometimes used to describe anything from a gala five day event which may draw 25,000 visitors, to a mill tour for a group of clergymen, the mill officials early defined their "open house" to mean a one day event open to anyone who wanted to come.

With these essential details decided, the company prepared a three quarter page newspaper ad to run in local papers the day before open house, it prepared publicity releases for newspapers, arranged for broadcasts before and during the event, and mailed invitations to the home of each employee, inviting the families to come.

A route was chosen with due attention to safety factors, interest to visitors, possible interference with production, and convenience of rest rooms.

Guides were selected and uniform talks prepared for them, carefully planned to sell the objectives of the event. Special badges for guides with ribbons in the company colors were prepared and other identification badges were given employees as a part of the technique of making them feel active participants in the event. Guides were thoroughly trained in a series of meetings held for a month in advance.

Employees were frequently asked to demonstrate some aspect of their work to visitors.

Open houses give the townspeople a better understanding of what the industry means to the community.

Working Plan for Public Relations

A BUDGET FOR "OPEN HOUSE"

Here's the actual budget for entertaining 2100 visitors at an open house event as reported by one mill:—

Booklets	$ 178.94
Invitations	75.00
Postage	60.00
Refreshments	420.80
Paper plates, cups and napkins	91.27
Sheets for tablecloths	73.68
Flowers	87.05
Chief hostess' salary	50.00
Hostess dresses and hose	197.55
Display (materials, cleaning, and pressing)	30.21
Scrapbook, guestbooks	12.00
Photography (supplies, reprints and developing)	25.00
Questionnaires	4.50
Letters to employees	8.00
Appreciation supper	15.84
Total	$1,329.84

A guest register was set up, and a photographer was employed to obtain pictures of the program for posting in the mill and for other publicity purposes after the event.

Results of Open House. Results were summed up thus by the company president:—

"We do not believe it would be possible to overestimate the value of this 'open house.' We lost no production on the two shifts which ran through the day. Comments of employees, letters to the mills, and expressions of visitors convinced us it was one of the best industrial relations jobs our plants ever attempted."

Such events have been held by a score or more of mills in recent years. All vary in details.

Highlights in Successful Open House. In all successful open house tours considerable attention is given to reception of visitors, usually in the company offices. Exhibits of finished products are commonly set up. Each guide is assigned but 12 to 15 visitors. Simple refreshments, often no more than soft drinks, are offered. Some printed material giving a few details about the plant is provided to carry away.

In addition, one mill offers gifts of some of its products to members of small groups such as cotton farmers, school teachers, or service club members.

One mill makes it a point to promote employee pride by having special attention given to families and friends of employees. They are shown where the employee works, and his supervisor arranges to be on hand to say some words about the quality of his work and his value to the plant. Another mill sponsors an essay contest for students who have been visitors.

Costs of Open House. Normally, cost per visitor declines in proportion to the number entertained. Cost of entertaining one select group given a lunch, shown a movie, and given a sample of the mill's product was $2.12 each.

Entertaining 2100 people cost another mill $1329.84.

A mill executive said cost for various open house events in this mill ranged from 57 to 70 cents a person. This included an item of $197.55 for dresses and hosiery of hostesses.

No matter what the variation in cost, this conclusion was common in every mill which reported on its experience:—

"We have seldom spent money to better advantage. We plan to do it again."

2. Good Press Relations

Newsmen Suggest Methods of Improving Relations with the Press

DOES BUSINESS get a "bad press" from the nation's newspapers? If so, is this because newspapers are unfriendly to business? Or is business at fault in its handling of newspapermen?

To get answers to these and other similar questions several score of editors, reporters, and business paper editors were recently asked to report on their actual experience with businessmen in gathering news, suggest how relations might be improved, and list the practices of businessmen which were most annoying to them. Then, a study was made of the successful practices of the far too few companies which boast excellent press relations.

Most significant finding from the study was that while a few editors and reporters described good relations in their communities, every one queried offered one or more criticisms. Several described experiences which had made them definitely hostile to plants in their cities.

Editors Are Pro-Business. Every writer declared his newspaper was strongly "pro-business" and wanted to give industry every possible break in the news.

"Of course, we're pro-business," one editor wrote. "Newspapers are business. They live on business. But our prestige and the confidence of our readers demands that we be fair in our reporting and report both favorable and unfavorable items about business just as we report the good and bad points of unions, public officials, and others whose activities are of public interest. But newspapermen are human—when a businessman makes the reporter's job unnecessarily difficult the reporter isn't going to extend himself to help

that businessman. Most likely, he will just ignore him."

Factors That Cause Poor Press Relations. Complaints most frequently voiced by editors and writers were these:

1. Some companies require that anything written about them be submitted for approval before publication. Newspapers never do that with anyone else. It's impractical because newspapers are constantly working against time to meet deadlines and this delays getting stories into print. But, more important, editors feel that editing the paper is not the function of the people about whom their reporters write.

2. Plant executives go over the heads of reporters, assigned to cover their activities, to the editor or publisher with news. This makes the reporter appear to be shirking his job. It's a natural reaction for him to hunt a news story which will make that company look bad because it has made him look bad. Certainly, it's unlikely he will make any effort to present company news favorably. Men widely experienced in press relations point out that it is the reporter who gathers and writes the articles which appear in papers and that his good will is of first importance.

3. Companies try to hide bad news, issue only favorable news. Too, such "favorable" news is often only advertising plugs, news men complain.

4. Public relations officers too often have to obtain approval of their superiors to release articles, another time consuming procedure. Or when a company has no press relations officer, it too often has failed to appoint anyone as a spokesman for it so that attempts to obtain news meet with so much difficulty, newspapermen give up or print rumors.

However, the picture is not all black. In many communities, especially those which are smaller, textile executives have established excellent relations with their newspapers and deal with them frankly to the advantage of both.

Results of Industry-Press Cooperation and Non-Cooperation. Comments by editors presenting differing viewpoints follow:

Textile Community (Massachusetts)—"Our relationship with our textile mills is excellent. At least once or twice a year we newspaper people are guests of local managements at plant cafeterias. Our columns are open to the mills for almost any article they offer us. We publish weekly columns of personal items prepared by mill personnel departments about their employees.

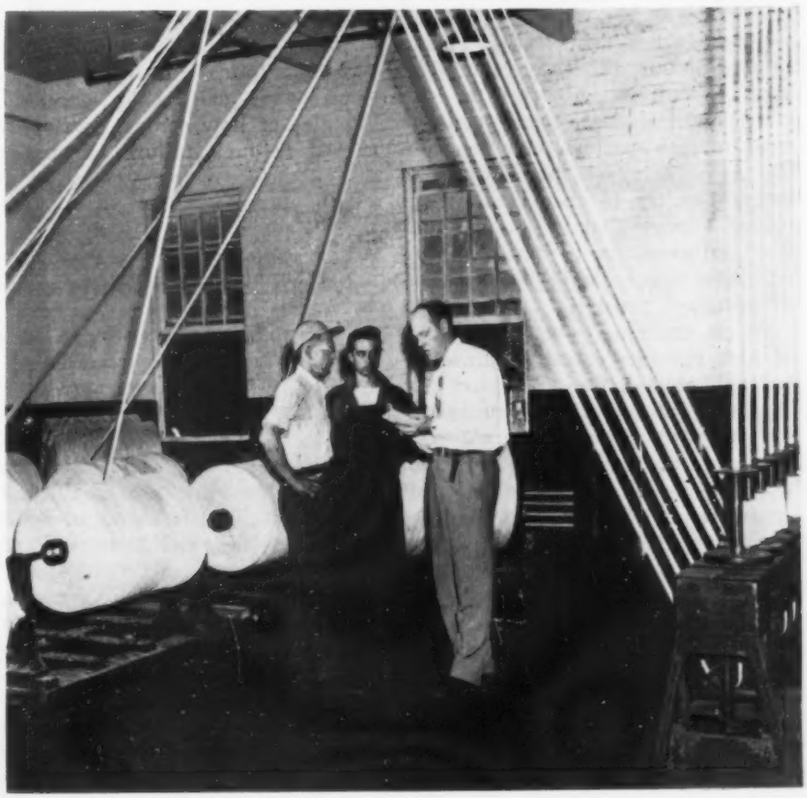
"Should an attack be leveled against the mills from any source, we would weigh it carefully for unfair or irresponsible charges, and we would give the mill management a fair chance to state its side. We know we can go to management in such matters and get a straight answer.

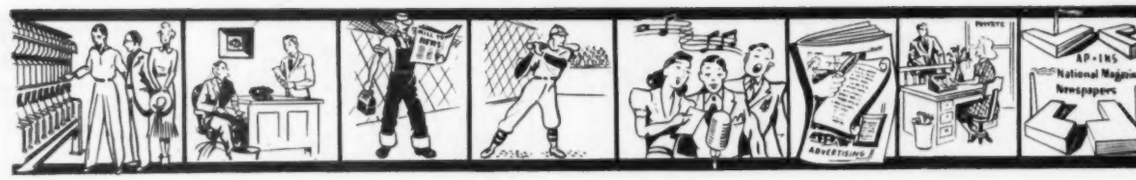
"The set-up is ideal except that mills do not take full advantage of opportunities we offer them. They do not sense the news value of material in their hands. The top officials are all experts in their own lines, but they are bound up in their own jobs and no news minded executive has taken over promotion of good local press and public relations even though the managements are proving by words and action that they desire to build greater good will and public understanding."

Textile Community (Massachusetts)—"Textile manufacturing is our foremost industry. Therefore textile news is important to us but we find it hard to obtain. The mills show a co-operative spirit only when they face a difficult situation and feel the need for a 'favorable press.' In such a situation, they hire an outside publicity writer unfamiliar with the situation. That method of handling mill news adds injury to insult.

"When industrial life runs normally, mills make no effort to keep my newspaper supplied with readable, interesting news even though our readers ask for it. It irks me to pick up a New York paper or trade jour-

Good press relations. Here a reporter is permitted to visit employees on the job to get his story.





PRESS RELATIONS

DON'T:

Refuse to talk to a reporter.

Go over a reporter's head to complain to the publisher about errors or to give him "big" news.

Try to hide "bad" news.

Demand to censor everything written about the company.

DO:

Have someone who is authorized to speak for the company available to the paper.

Give news to the paper regularly, not just when some good publicity is desired.

Find out what, how, and when the editor wants regularly in the way of news.

Treat reporters fairly and frankly. They'll keep confidences.

nal and spot an article about one of our mills we should have printed first. My reporters should not have to 'snoop around' for information when a news story breaks; neither should they have to print second hand reports picked up from other papers or talks with mill employees.

"When a mill receives a big order, a big order is cancelled, or when a new system of machinery is installed, our readers want to know about it. If an accident occurs, we'd like a first hand, straight forward report immediately.

"Another headache is that outside owners of our mills have not given local executives authority to issue news announcements on even the most routine matters. Our reporters complain they 'get the run-around' when they try to check some news report. I know that isn't intentional; the local executive is merely stalling while he checks with his superiors in a distant place.

"Some years ago, an accumulation of such episodes caused strained relations between the press and textile mills of our city. Management felt we were 'riding' the mills. For our part, we were unable to obtain a courteous reception by any mill executive and had telephone receivers slammed in our ears and doors closed on us. Our reporters naturally interpreted this as a hostile attitude.

"In the years since, there has been marked improvement, but much remains to be done. Most helpful would be a 'press officer' in each mill accessible to our reporters and with authority to give out news."

Tractor Factory (Illinois)—This large corporation assigns an experienced newspaperman on its staff not only to co-operate when local newspapers ask for information but to go into the factory and dig out news for the papers. His concern is solely with local news, and national releases are handled by a separate staff.

Simple Solution of Press Relations. Simplest solution of the press relations problem is offered by one editor:

"Any reporter assigned to the business and industrial beat on a newspaper can relate endless examples of how companies have suffered through failure to appreciate the value of co-operating frankly with newsmen. Yet, it's a simple matter to correct. If the president or ranking officer of a company will call and express a desire to establish more friendly and helpful contact with the newspaper, it's almost certain the editor and reporter assigned to cover the plant would gladly meet with him, describe their needs, explain their problems, and aid him in presenting the mill story fairly to the public.

"But the mill executive must learn to distinguish between news and publicity and appreciate that not all news will be favorable in this imperfect world. But the unfavorable news is almost certain to be printed because such secrets are hard to keep. The mill can expect a much better break in its presentation if it will state its case frankly and truthfully."

3. Employee Publications

Employee Publications Promote Better Company Understanding

IN HIS BOOK, "The Proper Study of Mankind," Stuart Chase cites the most pressing need of industry today as the establishment of effective two way communication between employee and management.

At a recent session of the Public Relations Society of America, some of the nation's outstanding experts in such communication agreed that employee publications are potentially the most effective single tool management can use to communicate with employees. However, they also agreed that too many plant publications are lacking in one essential quality—that is tact.

"Too often, management lessens effectiveness of an employee magazine because it wants to give the employee the material it thinks he should read, not the things he wants to read," one seasoned editor reported.

Yet, despite all such criticism and undoubted room for improvement, a

survey of editors, executives, and operatives reveals that seldom is an employee publication discontinued after once started. Too, while few claim any approach to perfection in so difficult a field, practically all feel that even substandard publications serve a valuable purpose.

Although no exhaustive study of every mill has been attempted, the rather casual survey indicates that in the textile industry about two of three employees receive such publications from their companies. These vary from simple and inexpensive mimeographed sheets to expensive four color magazine type publications with professional pictures and illustrations.

Space in the Community Newspaper. A small Georgia mill buys subscriptions to the weekly newspaper in its community for each employee and uses a section of the newspaper for a message from management and employee personal items.

An Alabama mill purchases a page in its weekly newspaper to carry mill news.

A Maine textile plant follows the same technique even though it is large enough to support its own house organ. It feels the plan serves several valuable purposes. Among these are (1) it acquaints the entire community with the textile mill and its employees, (2) it boosts pride of employees in the mill, (3) it wins the good will of the newspaper editor because it provides him with a newsy readable page for which he receives advertising revenue.

History of Employee Publications. Study of the history of the employee publication shows it parallels the growth of industry. In small plants, where the manager knew each employee intimately, perfect two way communication was established through daily personal contact. But as the mills grew, management found that employee loyalty and pride tended to diminish, misunderstanding of management policies was common, and employees felt less and less that they were an important part of the organization.

As early as 1891, the National Cash Register Company issued "Factory News" to try to overcome these difficulties. If not the first, it was one of the pioneers among house organs aimed directly at the employee. As industry grew, astute management recognized ever growing need to bring the employee into a more understanding relationship with management, and now employee publications go to some 40,000,000 employees in this country.

From editors of employee publications in the textile field whose advice was solicited, suggestions were gathered. These are shown in the box on page 104.

EMPLOYEE PUBLICATIONS

Plant papers and "house organs" can be best means of communication with employees, boost pride in the mill, tell the community about the company and win local newspaper editor's good will.

Tact is vital to effective publication.

In lieu of employee publication, purchase of subscription to and space in local newspaper is helpful.

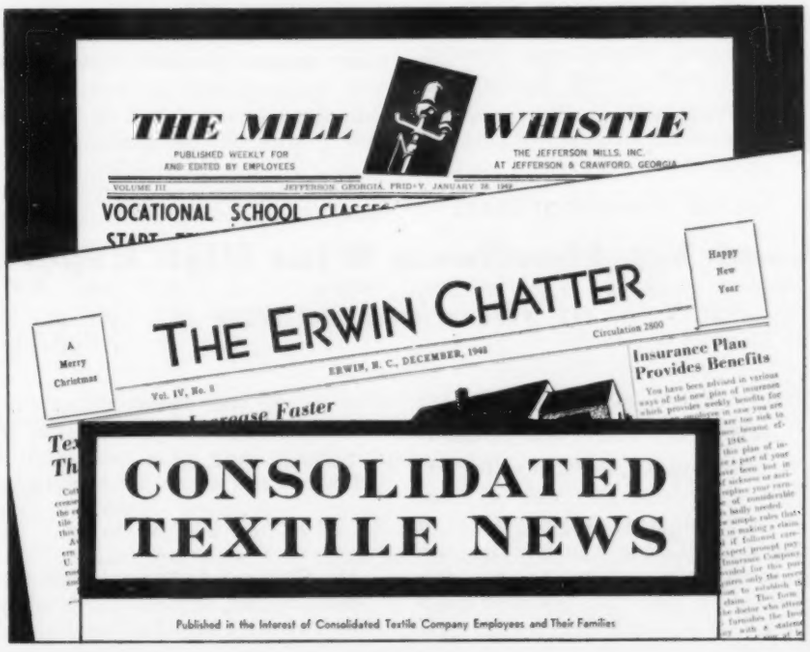
Problems of Employee Publication Editors. From editors come these actual examples of problems encountered and their solution:

Textile Plant (Massachusetts)—Safety information may be trite, but this company has effectively used its plant publication to reinforce its safety work.

Textile Plant (North Carolina)—Getting as wide a selection of employees represented as possible with least possible duplication of names so all employees will eventually be mentioned is important. This editor finds an "Inquiring Reporter" column which permits him to use names and pictures is important in helping do that.

Textile Plant (Massachusetts)—As more and more experienced newspapermen are employed as house organ editors, there is less tendency to describe company products and policies in the language and style of an ad writer. These editors dig into historical background, manufacturing processes, and research for angles

Employee publications are excellent means of communication.


THE MILL WHISTLE
PUBLISHED WEEKLY FOR AND EDITED BY EMPLOYEES
THE JEFFERSON MILLS, INC. AT JEFFERSON & CRAWFORD, GEORGIA
VOCATIONAL SCHOOL
THE ERWIN CHATTER
A Merry Christmas
Happy New Year
ERWIN, N. C., DECEMBER, 1948
Circulation 2600
Insurance Plan Provides Benefits
CONSOLIDATED TEXTILE NEWS
Published in the Interest of Consolidated Textile Company Employees and Their Families

SUGGESTIONS FROM EDITORS OF TEXTILE EMPLOYEE PUBLICATIONS

1. Keep in mind this is an employee publication, and the first essential is that it retain employee confidence and interest.

2. To retain confidence, restrict editorial matter to that which lies in what the industrial relations experts call "areas of agreement" between labor and management. That means the publication sacrifices employee confidence when the editor ventures to propagandize in controversial fields.

3. Weakness of many publications is that they are too filled with gossip (some offensive) and pointless chit chat.

4. Major purposes of an employee publication should be to inspire loyalty, foster pride in the company, educate employees on company problems, explain company policies, promote merchandising help among employees, reduce accidents, inspire suggestions for improved production, and, above all, make the employee feel he is a valued member of a good organization.

5. The employee wants to know these things about his company which his magazine should tell him:—Its competitive situation, its financial situation, its production achievements, its new products, and its future prospects.

which lend their articles greater reader interest but which still permit them to implant the facts management is interested in emphasizing.

For instance, the foregoing plant makes bathing suits. The company wanted to instill employee pride by making known the acceptance that these suits have among the best in their field. But instead of boldly saying so, the company's publication carried a well illustrated article on the history of the bathing suit, of much general interest, and inserted its points unobtrusively in the copy.

Film Manufacturer (New York)—A problem of the large organization with scattered plants, the employees of which do not know each other, is often how to maintain a feeling of unity and yet give each plant the employee news it wants. This is taken care of nicely and inexpensively by this large corporation. In each of its scattered plants it puts out an inexpensive and small four to eight page plant publication crammed with personal notes about employees—no overall policy news. Then it also issues for all plants an impressive slick paper magazine in color which deals with company policies and products and more general news of that nature of interest to all plants.

4. Good Neighborliness

Good Neighborliness Wins High Regard of the Community

SOME YEARS ago, a member of the city council in a Massachusetts city arose angrily to declare the textile mill of that city was no asset to the community. Recently, now as mayor, this same man recalled his previous statement and declared this company is now "our greatest single asset—an economic and social force vital to the well being of our city."

In that dramatic reversal lies the thumbnail story of a new spirit of neighborliness which is becoming apparent throughout American business.

The Changed Attitude. In the Massachusetts city, the story is a simple one. The mill installed bowling alleys for employees and invited other city teams to use the alleys. It made its cafeteria and social lounges available to employees for personal parties and weddings, bringing more and more outsiders through plant gates for a favorable impression.

It held a Christmas party for children of employees and then extended its invitation to other envious children of the community who appeared wistfully expectant. It provided a recreation field, tennis courts, and skating rinks, put in supervisors, and hung out the "welcome" sign for all comers.

All these were simple friendly things which a good neighbor might do for his fellows. In the language of the public relations technicians, these kindly acts are "community relations."

Living close to the people, the textile industry has always had an exceptional interest in its communities. As industry has become more aggressive in seeking friends and understanding, it has commonly begun its public relations programs on its home grounds. Even such industrial giants as General Motors and Standard Oil have become increasingly aware of the value of such community work and have given community relations activities ever growing attention.

Company's Citizenship Obligation—In Eyes of Public. In carrying on these neighborly activities, companies are merely discharging the responsibilities of citizenship which the community expects of them, a survey made by the Bridgeport, Conn., Chamber of Commerce reveals. In this survey, citizens interviewed asserted they did not consider it enough for a company to provide jobs and pay good rates:—26 per cent held management was obligated to work actively for decent housing; 28 per cent indicated belief that support of charities was a function of the companies; 17 per cent believed promotion of recreation, parks, nurseries, concerts and similar activities was a company responsibility; 9 per cent advocated community promotion and interest in civic affairs; and 4 per cent held companies were responsible for eliminating smoke, preventing stream

pollution, and helping keep the city clean.

Improving Community Relations. Improved community relations are promoted through many and diverse means. House organs distributed through the community improve understanding. Open house programs provide an opportunity to tell the company story effectively. Radio and press are being used with constantly increasing skill. Company advertising in local newspapers and circulation of easily understood annual reports have proved effective.

Among other effective programs of varied scope are these:—

Textile Plant (South Carolina)—A modern recreation building with library, auditorium, movie theater, snack bar, and swanky lounges was built and opened to the community at large as well as employees. Prestige of workers soared, their pride in their company was enhanced, and the community boasts now of the public spirit of its textile mill.

Textile Plant (North Carolina)—The plant employed an architect to survey the village and recommend complete modernization and beautification. Hard surfaced roads are being laid, and under a three year plan the whole community will get a face lifting operation.

Textile Plant (Massachusetts)—The company forbids placing of "No Help Wanted" signs outside its gates and insists every job applicant be given a courteous interview and, when possible, given advice as to any employment opportunities elsewhere.

"It's when a man needs a job that he most needs a friend," a company executive explains. "He will remember our friendliness at this time. Too, sometime we may want him. At the least, he will leave us with a good impression."

Chemical Company (Michigan)—Organized a male chorus, girls' chorus, mixed chorus, and symphony orchestra from the community at large. Concerts now attract 25,000 during spring festival season. Metropolitan Opera stars are brought in as guest soloists.

GOOD NEIGHBORLINESS

Many ways are found to show a company's desire to be a good neighbor.

The townspeople expect a company to want to be neighborly.

Even the sign outside the company office can make enemies or friends, depending on what it says.

Textile Plant (Alabama)—Young people who desire to attend college are allowed to work three months in the mill, then go to college for three months. Thus they are enabled to earn enough to meet expenses. At the same time, they get actual job experience and are so rotated through the mill departments they have usually found a job they want upon graduation. Under such a plan, five years may be required for graduation, but the delay is well worth while because of the added work experience obtained.

5. Radio Programs

Homespun Radio Programs Arouse Unusual Interest

EXCEPT for personal contact and television, no means of communication offers more intimate appeal to the community than radio.

More and more executives are learning that adequate talent and imagination is available in almost every organization to present an interesting program. Actually, the homespun quality of many such programs adds to their community appeal.

One attractive feature is the obvious reaction of operatives and the low cost because many excellent programs are being presented over local stations at costs running from $100 to $400 monthly.

One Type of Program. A simple program which has the whole town listening is presented by a Georgia mill. It is a 15-minute unrehearsed interview of a mill employee by a station announcer. Selection of employees to be interviewed is rotated among the departments, with overseers making the choice. The operative is asked about his job, his family, his hobbies, and his other interests.

The community is coming to recognize that the mills are employing some exceptional people. Operatives take more pride in their employment. The programs have a wide listening audience, and interest is keen in being chosen for an interview.

Talent Programs. An idea which might profitably be adopted by a group of mills in any area has been developed by a West Virginia steel company. A series of local talent

RADIO PROGRAMS

For local broadcast, simple programs prove most popular.

Interviews with employees stimulate pride in work.

Special events such as "open house" offer spot news programs of interest to entire community.

Trained talent not necessary.

musical shows were held in which employees and their children were contestants. Contests were held in auditoriums or other suitable places to select the best musicians (no bands or orchestras) or vocalists from among employees of one plant. Winners were picked by audience applause. Then winners from two plants competed in the first radio show. The radio studio audience then picked the best to appear against other contestants in following shows.

The contests won wide employee and community interest. The company further enhanced its community standing by purchasing instruments and providing instruction for the more talented.

Radio Program Ideas Unlimited. With growing interest in "open house" programs, another radio outlet is available as many stations feature such special events and would arrange a broadcast from the plant. A South Carolina mill not only arranged for such a broadcast of its open house, but put its president on the air to invite listeners to the event the day before it was held.

A Georgia mill honors local residents, long time employees, holds musical contests, and puts on a folksy Sunday afternoon program which it rates high among its more effective community relations efforts.

In Maine, a company has achieved unusual success with a "Do You Know Maine" show in which it uses local talent to dramatize interesting events in the state's history. The show has attracted such interest that fan clubs have been formed, the State Department of Public Instruction has asked permanent preservation of the material, many teachers assign students to listen as a part of their home work in history, and several booklets have had to be issued to meet demands for more information. Broadcast time costs $75 for 15 minutes; total cost of a 32 week program was about $5000.

A quiz contest for school children is a Saturday morning feature during summer months sponsored by a Virginia mill. Prizes are awarded. A survey revealed a listening audience of 11 per cent of the city's population—an amazing audience for that time of day. Each evening this mill presents a 15 minute program of company news. It also irregularly takes time to support chest x-rays, Red Cross drives, and similar civic projects.

A Massachusetts mill buys 15 minutes of time each week for donation to some worthy group such as a service club or orphans' home to allow them to tell their story to the public. The cost is $250 weekly in this rather large city with a 50,000-watt station. More than 35 groups have thus been sponsored, and the mill reckons the return in good will has been well worth the cost.

An Alabama mill president reports that he spends $100 a month to present a half hour broadcast each Sunday afternoon and thinks the money well spent.

"In this broadcast," he reports, "we bring out various phases of our operations from time to time, but we are primarily concerned with giving local talent and organizations a chance to appear on the radio and in promoting good will throughout the surrounding area."

Reaction of mill executives generally to their radio programs is that no one need hesitate to initiate such a program because of lack of highly skilled staffs. The radio station manager will offer technical advice, and any company seems to offer people with good voices and dramatic flare who can develop a program that will effectively capture local interest.

Employee radio programs offer intimate appeal to the community. One mill honors local residents, long time employees, holds musical contests, and puts on a folksy Sunday afternoon program which it rates high among its effective community relations efforts.

Working Plan for Public Relations

6. Health and Cultural Programs

Cultural Activities Enrich a Community

A COMPANY'S relations with the community will be greatly enhanced by activities that are designed to contribute to the health, culture, and enjoyment of both employees and townspeople. Among other benefits, such activities contribute directly to employee health, morale, and efficiency.

Cultural activities for employees, popularizing the arts, utilizing home talent, and encouraging employees with their individual hobbies frequently represent much of the social life of the community. Often interesting programs may be inaugurated with little cost to the company, the employees providing both personnel and amusement.

Many mills have attractive community club houses or auditoriums which provide a meeting place for indoor activities. A club, once organized, usually creates and carries its own program.

HEALTH AND CULTURE

Employee health, morale and efficiency are affected by conditions prevailing in the community.

A company's sponsorship of health, recreational, and cultural activities is good citizenship and good business.

The organization of clubs sets in motion a self-sustaining program of good community relations.

Many events can be arranged at low cost.

Employee participation in activities is most desirable.

Scouts of All Kinds. A good example of combined social and cultural activity is troops of Boy Scouts, Sea Scouts, Girl Scouts, Cub, and Brownie Scouts, which are found in many mill communities. Employees are encouraged to organize and lead Scout troops, and some mills have a full-time Scout Director.

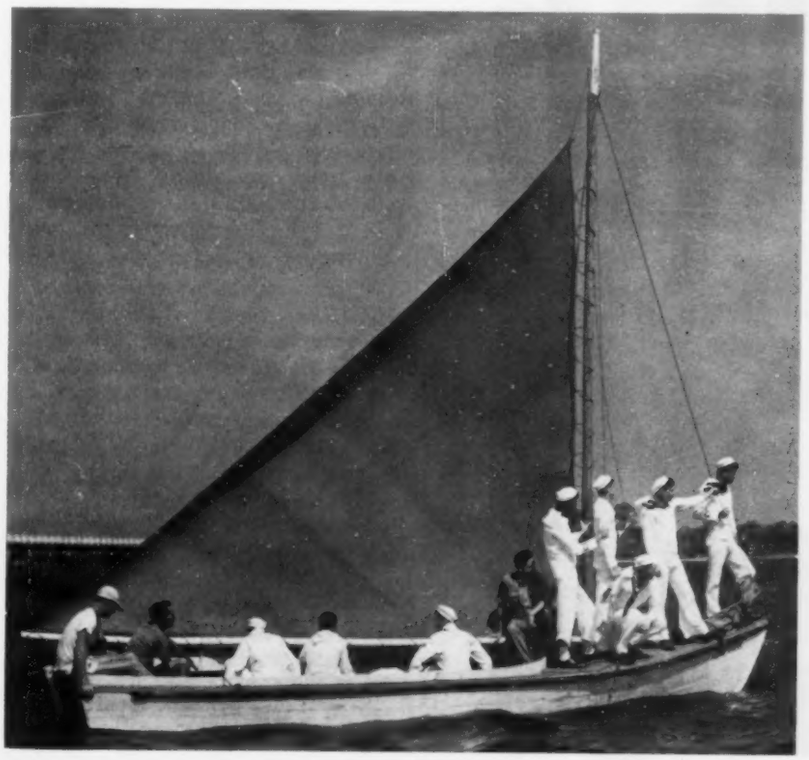
In North Carolina, the president of one large mill has been Scout Leader for his entire community for many years. One of Rhode Island's leading textile executives founded the Boy Scout movement in that state. The Scout chosen from 1,900 competing to represent the United States at the International Jamboree in Paris in 1947 was from a mill village troop in Georgia.

Clubs and Parties. Garden Clubs and Hobby Clubs are popular in both large and small communities and often lead to flower shows and hobby fairs with prizes worthy of competition.

Parties are popular, whether proposed by the company or employees. They frequently center around holidays and range from Christmas trees and Thanksgiving banquets to Fourth of July barbecues. "Family-night" parties are not so elaborate but imbue the spirit of comradeship. The regular Saturday night square dance of one textile community draws participants from neighboring towns as well.

Social and cultural programs on a much more elaborate scale may include concerts, lectures, and plays. One mill provides for its employees the regular lyceum circuit, including such famous artists as Nelson Eddy and John Charles Thomas.

Uniforms and Instruments. A mill in Virginia provides uniforms and instruments for the local high school band in return for summer concerts for the community. A full-time music director for the school is employed



A good example of combined social and cultural activity is troops of Boy Scouts, Sea Scouts, Girl Scouts, etc., which are found in many mill communities. Here Sea Scouts practice sailing a small craft.

by the mill. With his training, their glee club won the state championship repeatedly. A similar program is featured by a mill in Alabama, which makes music a must for every school child. Its local glee club has been state champion.

Dramatics and dancing classes may include all ages—children of the community as well as adults who enjoy Little Theatre work and Arthur Murray-type classes.

There are no stereotyped budgets or programs to meet all requirements and suit all communities. Employees enjoy varied programs and often help defray expenses. One community pays upkeep of its recreation park through parking-meter money. In other cases expenses for social outings are met from profits of refreshment stands. It has often been proved that employees who help to "pay their way" contribute more to recreation programs in enthusiasm and participation than in cases where the program is entirely "on the house."

Athletics for the Community. In recent years there is a pronounced trend toward integrating mill communities with the towns in which they are situated or which they border. Quite often the mill's athletic plant is made available for the town's baseball team or the community center is made availabe for the whole community upon occasion, resulting in a far more wholesome appreciation of the mill by the community.

In some communities, particularly in North Carolina, where there is the necessary enabling act and a State Recreation Commission which helps communities set up long-range programs, mills have integrated their recreational facilities with those of the city or town in a number of instances.

Under one such integrated program the mill furnished the golf course, swimming pool and a small clubhouse, and the town built a large community house, athletic plant, and playgrounds, etc. Both townspeople and the mill employees have the same facilities. The mill contributed about $350,000 and the town about $280,000.

In another North Carolina town a textile manufacturer matched dollar for dollar what the town could raise. Something like $800,000 was spent on a well-rounded program. In some instances the various industries, of which textiles may be only one, work together on long-range recreational projects.

For the Small Plant. Some of these cooperative programs are on the grand scale. What might a relatively small mill that is part of a relatively small town with no other important industry do when there is no cooperative movement or setup for one?

Not long ago such a mill built at relatively modest cost a community house and athletic plant. None had existed before. But the mill's center was the only thing of its sort in town. It was built for employees but by choice it soon became the social center for the townspeople too, and they patronized the library—the only one in town—and the first-run movies as much as the mill people, causing a higher regard for the mill and its operatives than has ever existed before.

Mill clinics and visiting nurses have long been common. The mills have been quick to participate in mass health movements such as x-ray examinations and the like.

Hospitalization plans, through payroll deduction, are common in the country today, but textile mills and one or two other industries around Roanoke Rapids, N. C., many years ago cooperated to build their own hospital and set up a hospitalization plan for all industrial employees in the area, attracting such widespread interest that observers have come from all parts of the world to see how it is operated.

Employee's child receives dental care in company clinic.

Foot Clinics. Something rather new in industry are the foot clinics established recently by both small and large textile mills in the South. The benefits are obvious when it is considered how many operatives suffer from foot trouble. The clinics not only reduced absenteeism, increased morale, resulted in wide national publicity (one won a citation from the National Foot Health Council), but the idea is now being adopted by other mills.

7. Local Advertising

Community Advertising Widely Used

ALTHOUGH newspapers are eager for legitimate news about textile mills and their operations, often there are facts which mill executives would like to place before the community which the editor could not run without laying himself open to demands for similar space from all business. Such facts can be most effectively disseminated through advertising with a strictly local message, a number of executives have found.

For instance, during the war a Massachusetts mill sought to attract more and better job applicants. It ran a series of advertisements in the local daily featuring different employees, picturing them at their machines, and telling of their ambitions and interests.

Results in increased employee prestige, better job applicants, and community feeling were so good that the mill continued the series long after the labor shortage ended. Now the same mill frequently uses full page space for such purposes as soliciting support for a community hospital to urging citizens to register and vote.

A Virginia mill runs a series of friendly advertisements under the signature of the president discussing the mill, its problems, and other matters of community interest. The company also posts reprints of its national advertising on plant bulletin boards and sends other reprints to community leaders.

A Maine company has found a way to use to advantage the space in high school annuals, church publications, programs for community events, and similar media which normally carries only the line "Compliments of - - - Company." A series of newsy advertisements have been prepared for such publications to fit the group to which they go. For instance, ads in high school publications emphasize job opportunities in the mills and carry an invitation to the graduate to come down and talk over his future with the mill's personnel manager.

A group of Georgia mill executives recently discussed the advisability of setting up a central committee to consider all such requests, both to weed out the racketeering type and to make more effective use of the space in putting across a message that would win greater good will for the industry in the community. Too, cost would be lower to the mills because one ad would be inserted for all the mills.

A corporation manufacturing air conditioning equipment in New York runs an advertisement each year advising the community as to just how much money it spends in the community annually on such things as payroll, taxes, supplies, construction, and printing.

One of the most unusual series of community advertisements ever published is that of the Talon Corp., Meadville, Pa. These advertisements, appearing regularly, are frank discussions of varied aspects of the company's business. One of the most effective was an illustrated ad showing just exactly where the return from 1000 zippers went—proportion paid employees, amount spent for machinery, part to profits, and a half dozen other similar items.

In one South Carolina city, merchants selling cotton goods and the mills combined to present advertisements and window displays calling attention to products made in the community and the value of these industries to the city. Mill executives were invited to address various clubs

COMMUNITY ADVERTISING

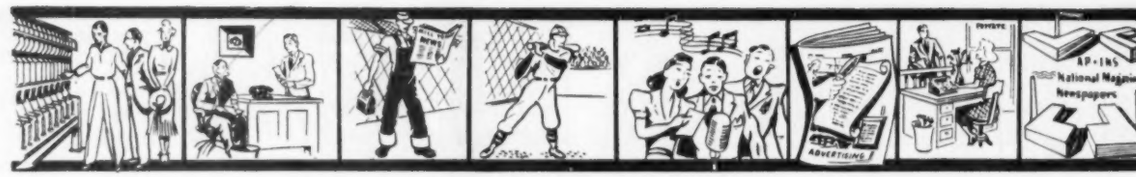
One way to get a message printed exactly as you want it.

Employees like to see advertising about their company, jobs, and products.

Helps keep community correctly informed about the company.

Earns good will of the paper.

CAN YOU ANSWER THIS QUESTION?
WHY
does the U. S. A., with only 6% of the world's population...
have
48% of the RADIOS
54% of the TELEPHONES
92% of the BATH-TUBS
85% of the AUTOS
FOR FALL RIVER



and speak on radio programs as a part of this program.

Another South Carolina textile plant has published dozens of advertisements locally covering a wide variety of topics—job opportunities for youth, training programs, payrolls provided in community, tribute to an emplcyee with a 75-year service record, a "Meet the Folks" series about people who work in the mill and historical sketches about the company.

A New England association of mill owners has sponsored a co-operative series of ads emphasizing good working conditions of employees and going into such things as insurance, safety, pay, and medical benefits.

Mill managers agree that cost of such advertising is low in proportion to benefits in improved good will and understanding which result.

An added dividend is the enhanced kindly feeling of editors toward plants using such space. As one Massachusetts editor in a town where the company uses such space wrote: "We of the staff enjoy cordial friendship with people in the mills, and they are solidly behind our paper. They give tangible evidence of their friendly interest by making substantial use of our advertising columns with institutional and good will messages in addition to advertisements for special needs."

Choosing a Director of Public Relations

ALTHOUGH the idea may still prevail in some places that a good public relations man should be a combination circus barker, magician, and lion tamer, more realistic yardsticks are generally used nowadays in filling the important post of public relations director.

Sincerity. The first quality to look for, after determining that the prospect has a thorough working knowledge of the public relations skills and techniques he will be called upon to employ, is sincerity. Beware of the glib, fast-talking promoter type who promises to "get it into the paper" or Life magazine with equal ease. Likewise, avoid the master of ceremonies kind who thinks only in terms of stunts.

The most important qualification is sincerity—a sincere respect for public relations work and a sincere desire to do a real public relations job as distinguished from a publicity or promotion campaign. Of course, the prospect needs to know the difference between publicity and public relations, and the fact that while publicity is usually one of the tools of public relations, it is not the end objective of the public relations program.

Newspaper Experience Helpful. Newspaper experience is an excellent foundation for public relations work so far as the technical skills are concerned. It teaches such things as concise writing, editing, makeup, layout, how to get and assemble facts rapidly, how to present facts tellingly, how to get along with editors, and how to prepare material in a form that is acceptable to editors.

Yet, newspaper experience is not in itself a guarantee of proficiency in public relations work. More than a few excellent newspapermen have failed in the public relations field for one reason or another and often because of the inability to think in any other terms than news releases.

If the public relations director is going to have to be pretty much a one-man department, then he will have to know how to write news stories; how to plan, lay out, and make up booklets and the company house organ; how to gauge printing and its affiliated processes such as

PUBLIC RELATIONS DIRECTOR—WHAT IT TAKES

If you are looking for a good public relations director these are the qualities you need to find in him:

1. **Sincerity**
   A sincere desire to do a real public relations job—not a publicity stunt—is the most important qualification for a public relations director.
2. **Judgment**
   Ranks next to sincerity. The conservative rather than the spectacular will accomplish the most with a long-range program. He aims at winning public confidence rather than public amazement.
3. **Technical Skill**
   a. Writing and editing;
   b. Layout and makeup (for booklets and house organs, etc.);
   c. Kinds and costs of various printing;
   d. Photography;
   e. Some knowledge of radio scripts.
4. **Editorial Sense**
   Ability to judge news releases, booklets, and other uses of the written word.
5. **Diplomacy**
   Ability to get along with people is a "must."
6. **Liking for People**
   An understanding of people is required for writing, speaking, handling meetings, and all other public relations functions.

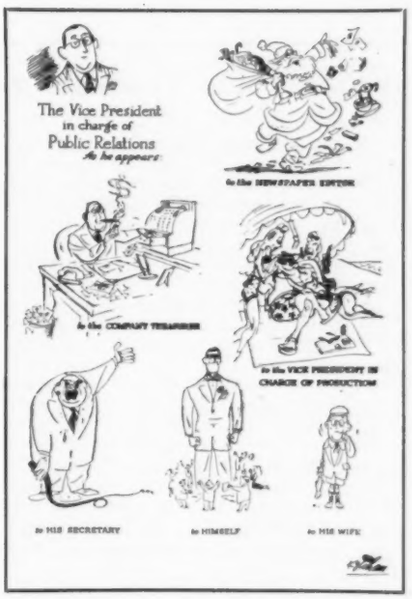
vari-typing and offset; how to dummy pages and crop pictures, and a number of other mechanical operations characteristic of the newspaper and magazine editorial department.

In these days, he should know how to prepare radio scripts and shorts.

He also needs to know how to take pictures himself or to direct their taking so that he can get an approximation of what he wants.

Judgment Essential. Assuming that the candidate either has the necessary mechanical knowledge or can hire it, sound judgment probably ranks next to sincerity as a prime qualification for a public relations director. Contrary to what is sometimes presumed, the public relations director who accomplishes the most in the end and who builds with lasting effect for his company is conservative rather than spectacular.

At the same time, the effective public relations director understands full well that the coldly clinical approach is seldom winning and that people react more quickly to the warmly human approach.


The Vice President in charge of Public Relations
As he appears
to the NEWSPAPER EDITOR
to the COMPANY TREASURER
to the VICE PRESIDENT IN CHARGE OF PRODUCTION
to HIS SECRETARY
to HIMSELF
to HIS WIFE

Getting Along with People. The ability to get along with people is of course a "must" in the public relations director. He must have an understanding of and genuine liking for people. But getting along with people is not a recommendation for the back-slapping, drink-buying, story-telling, night club habitue; nor for the fawning "yes man" who has no convictions of his own and wouldn't have the courage to stand by them if he did.

Besides his editorial work, the public relations director should be able to handle meetings of virtually all kinds and make an acceptable speech, but no oration. He must know how to use meetings and speeches as public relations tools.

Another medium which he should know about, too, is exhibits of several different kinds—an exhibit acceptable for use in schools, exhibits for general public display, plant exhibits, etc. He doesn't have to know how to build them but he should know how to get them built satisfactorily.

Most important of all, however, the public relations director's professional knowledge must be enhanced by qualities of character and personality which enable him to understand public relations as a trust.

Good Public Relations Not a Matter of Money

EXAMINATION of the public relations budgets of many business and industrial concerns disproves the charge that this activity requires the scattering of huge sums of money to the four winds.

Experience, combined with good results from nominal expenditures, is gradually correcting the old misconception of public relations as an expensive luxury to be undertaken only when it can be deducted for tax purposes.

Good Public Relations Policy Requires No Allocation of Funds. The small company is not precluded by costs from the benefits of good public relations. In fact, a good public relations policy can be put into effect without the allocation of any funds to it specifically. For example, the box on the next page shows what one small textile mill does to further good relations with the public, although it does not have a public relations budget as such. Planned public relations budgets are shown as follows:

$5,000 BUDGET

Part-time salary	$2,400.00
Booklet (printing)	1,000.00
House Organ (monthly)	600.00
Mill visits	500.00
Press material (photos)	500.00
Total	$5,000.00

$10,000 BUDGET

Salary — full-time public relations director	$5,000.00
Press photography	500.00
Booklet	1,500.00
Plant visits	2,000.00
House organ (monthly-mimeographed)	600.00
Office Supplies	200.00
Local advertising (institutional)	200.00
Total	$10,000.00

$25,000 BUDGET

Salaries, PR Dir.; Clerk	$10,000.00
Press releases, photos	2,400.00
Booklets	2,500.00
Open Houses, Plant Visits	5,000.00
House Organ (monthly)	2,400.00
Office Supplies, Misc.	1,200.00
Local Advertising (Institutional)	500.00
Special Projects	1,000.00
Total	$25,000.00

Plainly, the public relations budget can be tailored to fit the pocketbook; and so far as a company's standing in its own community is concerned, it does not depend solely on the amount of money expended. Of course, this yardstick does not apply to a large company which has mills in several different communities or to a company whose best interests require that it become favorably known to large groups of people.

Working Plan for Public Relations

NO BUDGET—BUT SMALL MILL FURTHERS PUBLIC GOODWILL

1. Instructs its switchboard operator on courteous telephone answering and service.
2. Instructs its reception room girl, who also handles typing and some clerical duties, on how to receive each visitor courteously and fill his requests as promptly as possible.
3. Makes certain that when the local newspaper calls on the phone or sends a reporter there is someone on hand to give a courteous answer and, unless it is confidential, to give whatever information the paper wants. If the information is regarded as confidential this is explained to the reporter with the reasons why. Great care is taken as a matter of policy to avoid giving the reporter any feeling that he is being "given the run around."
4. The president of the company and his superintendent make themselves available to give talks about textiles whenever requested by some local group.
5. Small groups of townspeople, such as teachers, ministers, merchants, community officials, etc., are invited from time to time to visit the mill. Either the president or the superintendent acts as a guide. By keeping the groups small no elaborate preparations are required for the visits. Each tour, however, is preceded by a brief explanation from the company president or superintendent as to what the visitors are about to see.
6. All company personnel are encouraged to participate in community affairs.
7. The yard around the mill is always kept tidy, and flowers and shrubbery have been planted to make the premises more attractive.
8. A little lumber, a little paint, and some effort resulted in a neat company sign which stands in front to identify the mill for visitors and passers-by.

Industry-Wide Program Aids Large or Small Company

MANY of the results of an industry-wide effort are now evident from the public relations program initiated for the textile manufacturing industry Oct. 1, 1946. A great deal more information about the industry is now being published in newspapers and magazines than was being printed a few years ago, and it is more favorable to the industry. At the same time, within the industry more mills are now carrying on company and community public relations activities than ever before.

Textile Information Service. Much of this information being printed is generated by the Textile Information Service, a news agency that was set up as a key feature of the program to relay news to the newspapers, magazines, editors, and writers. Staffed by newsmen who are continuously roving through the textile manufacturing states, visiting the mills and interviewing mill executives and other people to develop news about the industry wherever they find it, the Textile Information Service has been issuing a steadily increasing flow of news stories, news photos, background data, and other matter which has resulted in thousands of printings in hundreds of newspapers throughout the country and in dozens of magazines.

The operation of the Textile Information Service has demonstrated how a local story issued from or about one company and originally destined for publication in perhaps only one newspaper can be mushroomed into hundreds of newspapers,

WHY AN INDUSTRY PROGRAM

Major U. S. industries are expanding their industry-wide public relations activities even though individual members carry on their own company programs.

No company is large enough to do the industry-wide job alone, or too small to share in benefits. No company, large or small, could escape consequences of socialized industry.

An industry program reaches many more people than a company program can, with more persuasive material at a lower cost.

Information about an industry is regarded by editors, educators, and the public as more objective, more important and more impartial than matter bearing a company label.

An industry effort supplements and multiplies the benefits of a company program.

The textile industry's program is showing results in great increase of published material, in new public interest in the industry, and in educational activities designed for teachers and students.

The industry's program also stimulates more effective public relations work within the industry.

and how information from one company can be combined with information from others into a news article worthy of national distribution by the great press services such as the Associated Press, United Press, INS, and NEA. By this process the number of people reading favorable facts about the industry has been multiplied into the millions, and information has been relayed to large groups of people who live outside the textile regions who have never seen a mill.

One of the recent special projects of the Textile Information Service which has received wide attention is a series of historical sketches prepared in "comic strip" form which have been appearing in close to 200 newspapers. This is the second use made by the program of the "comic strip" technique of disseminating information, the first having been six pages of sketches in an issue of one of the better comic books distributed in the hundreds of thousands of copies throughout the country.

Radio and Educational Work. Much emphasis is now being placed in other phases of the industry's program on educational activities designed to interest young people in the industry and to give them a true picture of its progress, character, and importance. One of these is the first of a series of radio forums broadcast in February from North Carolina State College, School of Textiles, at Raleigh, N. C., participated in by students of the school and textile executives. Similar forums are now being scheduled for other points in which high school students will participate.

The first of a series of "Science in Action" visits by high school science teachers to the mills was inaugurated in April and May, the first at Crown Mfg. Co., at Pawtucket, R. I., and the second at Cannon Mills in Kannapolis, N. C., as an educational activity designed to give teachers a true picture of the industry.

Still another educational project sponsored by the Textile Committee on Public Relations is a number of textile conferences such as one held last summer at the University of Idaho. The conference at Idaho was conducted in connection with a six-weeks lecture course arranged with the assistance of the industry's public relations committee. Similar conferences which are open to the public as well as to students and faculty are being arranged for other western universities, including Illinois, Denver, and Washington, for this summer.

One of four special booklets issued to date by the Textile Information Service also is designed especially for young people. This is entitled "Your Career" and was prepared as an outline of the job and career opportunities to be found in the industry and as a vehicle for conveying factual information about the industry. The booklet, well received by teachers and students last year, was revised for 1949 and is again being distributed by the mills to high school seniors in their areas.

Among other activities being carried on by the public relations committee is the circulation of two traveling photo exhibits which have already been viewed by close to half million people.

Experience Exchanged. The Committee also has sponsored numerous meetings of a round-table nature to provide an exchange of experience for the mills in the development of company and community relations activities. A series of such meetings is now being held in Southern states and will be inaugurated in New England in the next few weeks.

All of the material which is issued under the direction of the public relations committee is aimed at calling public attention to five basic points:

(1) The economic importance of the industry to the nation as a major,

Why an Industry-Wide Program

REASONS why participation in an industry-wide program is essential to a company even though it may be conducting a company program itself are many. One of the most important is the fact that an industry-wide program yields information which is more acceptable than company or brand-name information for wide public dissemination. Industry-wide information is regarded by newspaper, magazine, and radio editors as more newsworthy and objective than information reporting on the activities of only one company.

To be sure, unusual information about an unusual company may receive the attention of national publications. A national publication may also publish interesting studies of business personalities and through this kind of article print information about a particular company.

Generally speaking, however, industry-wide information is more likely to have more of the elements of news and less of what the editor regards as the taint of advertising and promotion, and so has wider acceptance than that which bears a company label. Industry news usually has more importance, especially where it indicates the status of an industry as a whole and points up trends. It naturally concerns more people and covers a broader area of public interest.

Even news about a single company can be circulated farther and be made to reach more people through an industry-wide program. For one thing, an industry-wide organization has the facilities for wider circulation and can multiply one news article into hundreds and extend publication far beyond the local newspaper and the company's home community.

In these respects, an industry-wide program can be seen to expand the results of the company program. The two are not substitutes for each other, or are they competitive with each other. They are complementary and each makes the other more effective.

An industry-wide program also yields information that is best and, in fact, necessary in many cases for presentation in other forms such as special booklets, radio programs, in speech material, and through ex-

Working Plan for Public Relations

PUBLIC RELATIONS CHECK LIST

(Check the following to see where your company stands on the public relations ledger.)

	Yes	No
1. Do you have an employee health, recreation, or social program of any kind?		
2. Does the company aid any community programs?		
3. Does the company sponsor or help any employee clubs or organizations?		
4. Does the company help any community clubs or organizations?		
5. Do you have an employee publication or furnish employee items in the local paper?		
6. Do you have friendly relations with the press?		
7. Is someone designated in the company to deal with the local papers?		
8. Do you ever advertise in the local paper?		
9. Has the company ever held an "open house?"		
10. Do you invite groups of teachers, students, civic leaders, or others to go through the mill?		
11. Do company executives participate in community affairs, address local groups?		
12. Are the premises of your mill kept tidy?		
13. Are your switchboard phone operators and receptionists courteous to strangers?		
14. Is your reception room comfortable?		
15. Do you subscribe to the industry's public relations program?		
16. Do you have a public relations director or employee?		

free American industry producing essential goods and providing thousands of jobs;

(2) The progress of the industry in research, training, and modernization;

(3) Job opportunities, good working conditions, and good living conditions offered throughout the industry;

(4) The high caliber of the people who work in the textile mills of America;

(5) The social benefits contributed by the mills through sponsorship and support of health services and cultural and recreational programs in their communities.

Even with a limited budget, the industry's public relations committee has set in motion a considerable number of activities which experience has shown are more effective under industry than company auspices. Concrete evidence of good results is accumulating in the steadily growing volume of information being published; the increasing number of requests received for news, exhibits, booklets, and other material prepared to date; in the response of teachers and students to lectures, exhibits, and meetings arranged for them; and in the expansion of public relations activities within the industry.

The conclusion that all of this represents progress stands on the premise that the public's attitude towards the industry is the collection of opinions that people form—based on what they read, hear, and see.

Members of the Textile Committee on Public Relations are: chairman, G. Ellsworth Huggins; secretary, George Nichols; treasurer, Roger Millikin; and Fuller E. Callaway, Jr.; Charles A. Cannon; James A. Chapman; Donald Comer; Norman E. Elsas; P. H. Hanes; George S. Harris (ex-officio); Gordon Harrower; C. C. Hertwig; Luther H. Hodges; Seabury Stanton; Percy S. Howe, Jr.; Walter S. Montgomery; Harvey W. Moore; J. H. Lanier; Paul A. Redmond; William A. L. Siblev; Donald B. Tansil; Paul B. Wells; and Kenneth B. Cook.

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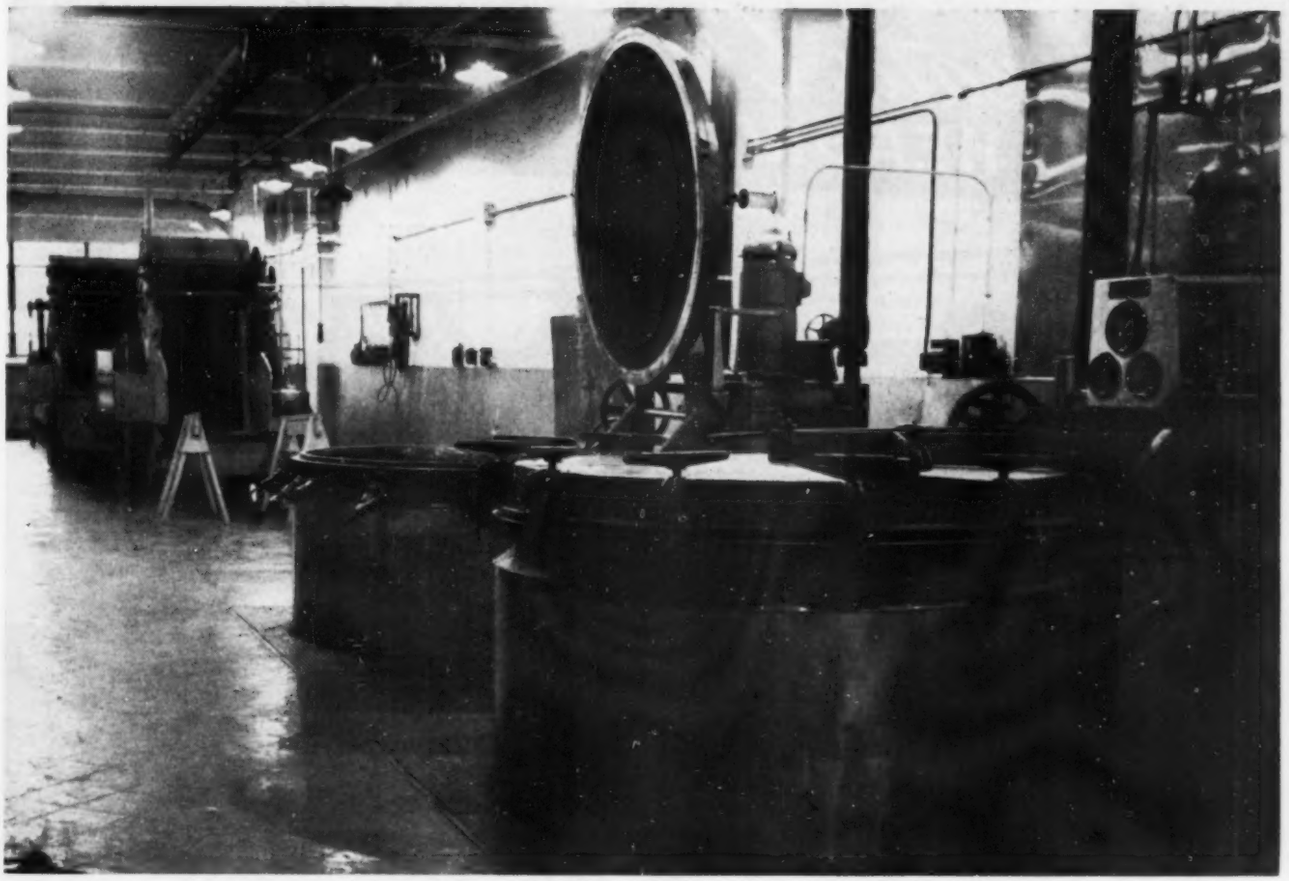
hibits. Schools, for example, are loathe to accept printed matter or exhibits which present only the affairs and products of one company. Yet, the schools are eager to receive factual information about industry. Because they are being bombarded with a great deal of propaganda material which seeks to discredit industry, it is essential that factual information about industry be made available in the fields of education in acceptable form.

Still another area where industry-wide information is more persuasive than company information embraces state legislators and other officials, and members of Congress. Lawmakers are not likely to give as much heed to the representations of a single company as to the weight of factual information pertaining to an entire industry.

There also are internal benefits from an industry-wide program. As a collective effort participated in by many companies and many individuals, it is a stimulating process which inevitably generates a highly useful exchange of information. Through an industry-wide program, experience can be passed from one company to many and all can profit by each other's mistakes and successes in public relations work. This, of course, helps to increase the efficacy of any company program.

The effects of good examples also are one of the most noticeable gains of an industry-wide program. As public attention is directed to an industry's good points, companies which may not up to then have been giving much attention to such matters begin adopting more enlightened policies. This progress reflects new credit on those companies and in turn on the rest of the industry and thus helps to eliminate sources of bad public relations that hurt the entire industry. The process is accumulative, and often the benefits within an industry are as great internally as externally.

Finally, of course, an industry-wide program is the most economical form of public relations activities. More people can be reached through an industry-wide program more economically than if the same size job were undertaken by a single company. The cost is spread among many.



New Riggs & Lombard pressure dye kettles. Dyed stock in baskets is removed by electric hoist suspended on overhead rail, top left center, and is transported to the drier hopper, left center. The saw horses serve to support the basket while it is unloaded into the hopper which has a capacity of 600 pounds. The drier hopper feeds a new Sargent drier which drops the stock into a chute after the drying operation. Three stock baskets are provided for two dye kettles to assure a continuous flow of work.

New Machines at Springfield Woolen

Improve Wool Raw Stock Dyeing

Staff Prepared

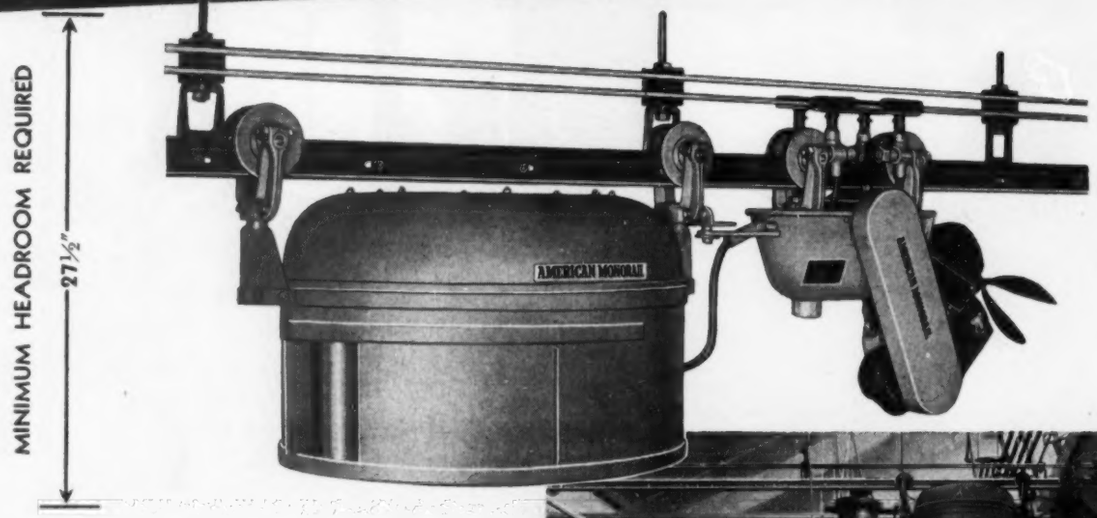
IMPROVED quality of dyed stock and a reduction in cost of labor and the amount of materials used in dyeing are among the advantages resulting from full scale operations with new dyeing equipment in use at Springfield Woolen Mills Co., Springfield, Tenn.

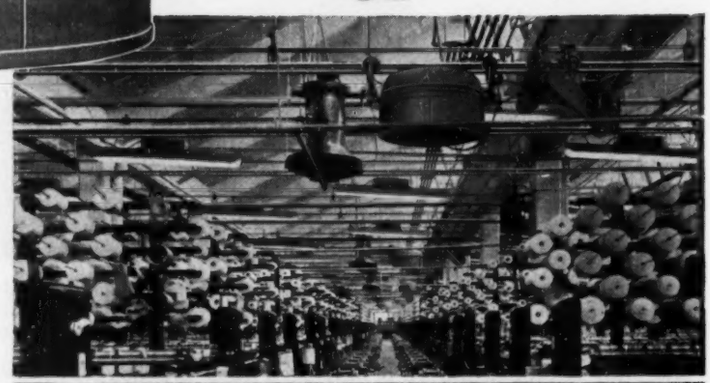
Formerly, production was approximately 3000 pounds of dyed stock in eight hours, and the work was done by nine operatives. Seven 250-pound capacity open-type wooden dye tubs were used for all wool stock dyeing in this plant.

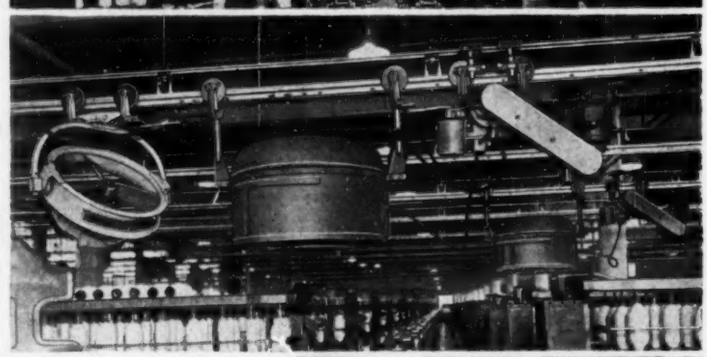
New Dyeing Facilities Increase Production. Two 600-pound capacity stainless steel pressure dye kettles (Riggs and Lombard) process 3200 pounds of dyed stock in eight hours and require only two men to operate the equipment. From actual production records of one week (six day run), 541 man hours were required for operating the old equipment in producing 31,459 pounds of dyed stock. The new dyeing equipment requires 80 man hours of labor in producing 16,050 pounds of dyed stock. Working conditions are improved considerably with the new installations, and operations are much less laborious for the reduced labor force than for the nine men formerly required.

Dyeing Procedure Simplified. Chrome and acid dyes are used at Springfield, and the bright colors are usually acid. When the wooden tubs were used in dyeing a chosen color and it became necessary to change to another color, the tubs had to be boiled and treated with ammonia to remove all traces of the old dyestuff. For

Automatic Cleaning UNDER LOW HEADROOM CONDITIONS



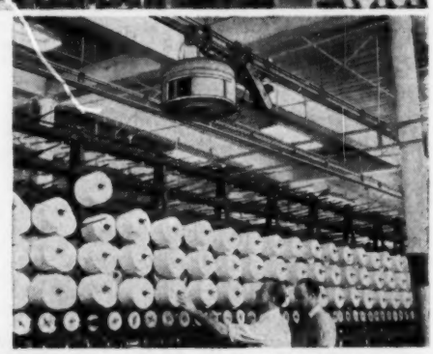




Low ceiling structures, low air ducts, low humidifying lines or any other low headroom condition can easily be met by American Mono-Rail Automatic Cleaning equipment. To accomplish this, the blower distributor housing is mounted as a trailer to the MonoTractor propulsion unit.

As little as 27½ inch clearance is all that is needed between the top of your twister or spinning frame creels and the ceiling. But don't bother to measure—call in the American MonoRail engineer. He will survey your mill, at no obligation, and give you the benefit of his wide experience in saving time and labor with automatic cleaning systems. It's a date if you'll write.

Send for copy of 24 page Bulletin CB-3 explaining arrangement for meeting low headroom conditions.



THE AMERICAN MONORAIL COMPANY

13106 ATHENS AVENUE **CLEVELAND 7, OHIO**

OLD METHOD

Acid dyestuff on 250 pounds of stock

Operation	Time required
1. Dissolve dye and add acid in tub	10 minutes
2. Fill tub with water	10 minutes
3. Load and wet out stock (two men)	10 minutes
4. Bring to boil while stirring with pole (two men)	30 minutes
5. Boil	60 minutes
6. Drain (in tub) and rinse	25 minutes
7. Unloading (two men)	15 minutes
8. Truck to extractor, extract, and carry to drier	50 minutes
Total time	3 hrs 30 minutes

NEW METHOD

Acid dyestuff on 600 pounds of stock

Operation	Time required
1. Loading	20 minutes
2. Wet out stock	10 minutes
3. Add dyestuff	10 minutes
4. Bring to boil	25 minutes
5. Boil	50 minutes
6. Rinse	20 minutes
7. Unload and convey to drier	5 minutes
8. Unload into drier hopper	10 minutes
Total time	2 hrs 30 minutes

example, if a change were made from bright red to pastel blue, any trace of red dye left in the tub would produce a bad effect on the blue stock.

The pressure kettles are better for quality work on fine grade wool in that the liquor is circulated while the wool remains stationary.

Liquor to wool ratio is lower in the pressure machines, and the temperature is increased slightly. These two factors combined have permitted a reduction of 10 per cent in the amount of dyestuff required. Current results show that the liquor penetration is aided by pressure circulation. The temperature is more uniform throughout the kettle during dyeing, and these factors were influential in reducing the liquor ratio to wool because the dye bath is more thoroughly exhausted during the process.

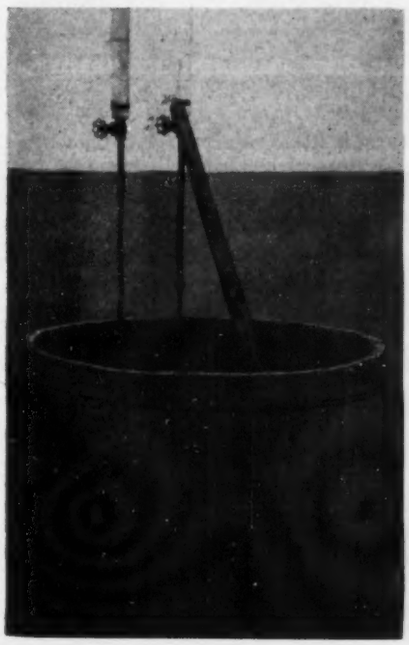
Steam Requirements Lowered. The new machines use less steam in dyeing 600 pounds of stock than the old tubs required for dyeing 250 pounds. This economy is attributed to pressure, insulation around the kettle, closed top, and lower liquor ratio.

Typical Dyeing Procedures. For comparative purposes the operations are itemized in the boxes above to show the time required to dye a batch of stock under the old and new systems respectively.

Dye is dissolved in a separate tank and the operations are doubled up for the new procedure, thereby conserving time.

A complete new wool drier with 600-pound capacity feeder hopper is located in the dye house to minimize the problem of transporting goods from the kettles to the drier. An overhead hoist carries the baskets of dyed stock directly to the drier which was furnished by C. G. Sargent's Sons Corporation. It is not necessary to handle the stock after it is fed into the drier hopper. A chute is located in the floor at the delivery end of the drier, and the dried stock is tumbled from the apron into the chute through which it is carried to the storage bins.

Seven open-type wooden dye tubs like this were replaced.



Facilities for piece goods dyeing have also been modernized. Shown here are three new Rodney Hunt rope type dyeing machines.

THIS revolutionary finishing technique subjects the greige goods to a heat bath of 1200° Fahrenheit to give texture and pliability to fabrics woven of Fiberglas yarns. Coronizing anneals and relaxes the yarn, and sets the crimp, making a wrinkle-proof fabric with soft hand and permanent water-repellency. Other important advantages can be achieved in the finishing. Coronizing has vastly extended the uses for Fiberglas yarns, for now you get textile characteristics in glass fabrics!

Fiberglas yarns and Coronizing are made to order for today's competitive markets. They offer many opportunities for the creation of improved products with new and different selling features. The remarkable Fiberglas marquisettes — a sensation in the curtain market — are just one example of the possibilities inherent in this new process.

These plus textile values are yours for the taking. We will welcome the opportunity to work with you in your mills, or through our textile laboratory where skilled technicians are at your service. Write or phone Owens-Corning Fiberglas Corporation, Textile Products Division, 16 E. 56th Street, New York 22, N. Y.

In Canada: Fiberglas Canada Limited, Toronto, Ontario.

- High Tensile Strength
- Dimensional Stability
- Non combustibility
- Lasting Beauty
- Resistance To Mildew & Rot
- Excellent Electrical Properties
- Resistance To Oils & Acids

*Fiberglas is the trade-mark (Reg. U. S. Pat. Off.) of Owens-Corning Fiberglas Corporation for a variety of products made of or with glass fibers.
Coronize, Coronized and Coronizing are trade-marks of Owens-Corning Fiberglas Corporation.

OWENS-CORNING FIBERGLAS Yarns

Mill men and suppliers at Biloxi meeting of Alabama Cotton Manufacturers Association.

"Realistic Optimism" — Stumberg

Alabama Manufacturers Meet at Biloxi

Staff Report

THOUGH Alabama cotton manufacturers held their convention during a period of decreased activity, signs on the horizon were already indicating better times—and President B. G. Stumberg, looking toward the future, was inclined to include the term 'realistic optimism' in his annual report.

The annual meeting of the Alabama Cotton Manufacturers Association was held in Biloxi, Miss., the scene of the past several conventions of the group, April 14-16.

Mr. Stumberg pointed out that the textile industry has spent millions during the postwar period for additions, buildings, and modern high speed equipment, getting ready for the day of highly competitive markets. He warned, however, that the industry could expect smaller profits in the future.

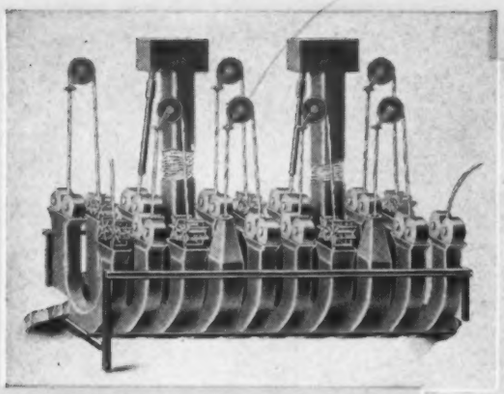
Speaking on the subject of public relations, Mr. Stumberg advocated starting at home in the improvement of industry standards, and he emphasized that selling the system of free enterprise is essential. The speaker also told of the value to the mills in conducting open house tours as a phase of the local public relations program.

Dr. J. L. Brakefield of Birmingham said that the U. S. has reached the pinnacle because "we are free men and work under a system of free enterprise." He traced the history of the South since Reconstruction Days and advised that within the last 10 years the manufacturing capacity of the South has increased 90 per cent.

Paul A. Redmond, Jr., executive vice-president of Alabama Mills, Inc., Birmingham, was elevated from the vice-presidency to president of the association, succeeding Bert G. Stumberg of Mt. Vernon-Woodberry Mills, Tallassee, who became chairman of the board of the association, succeeding in turn Claude Elrod of Boaz (Ala.) Mills. Other officers elected were: Thomas D. Russell of Russell Mfg. Co., Alexander City, from treasurer to vice-president; D. Hampton Morris, III, Geneva (Ala.) Cotton Mills, treasurer; and Dwight M. Wilhelm, Montgomery, executive vice-president.

OFFICERS OF ALABAMA ASSOCIATION

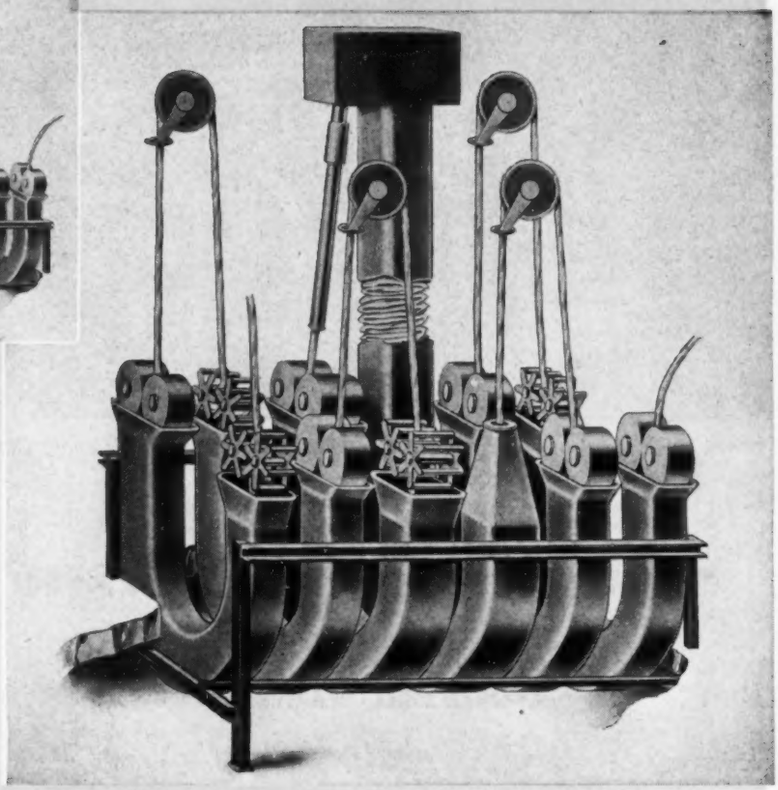
Elrod **Stumberg** **Redmond** **Russell** **Morris** **Wilhelm**



*Patent Pending

Side view of the two-stage Butterworth Junior Bleaching Unit, showing "U" type Washers, Saturators, Squeezers and J-Boxes.

Butterworth Junior Bleaching unit, single stage system, showing Squeezer, "U" type Washers, Saturator and J-Box. Note compact size of the bleaching unit, and stainless steel construction.



Junior does a "Man-sized" Bleaching Job

If your production does not warrant a full-sized continuous bleaching range, yet you want the benefits of continuous bleaching, here is the range for you!

You can do high-speed continuous bleaching in a fraction of the floor space formerly required. You can bleach knit goods or cotton piece goods in an area *13 feet long* and *16 feet wide!* Here is a single-stage bleaching unit extremely compact in size, yet so functional and efficient it handles cloth at an average rate of 50 yards per minute.

The new Butterworth JUNIOR Bleaching Unit is a complete, operating job fully equipped with Squeezer, Washer, Saturator, J-Box, reels, motors, instruments and auxiliary equipment.

The specially-designed J-Box on the Butterworth JUNIOR Bleaching Unit handles 300 to 600 lbs. of cloth per hour. Cloth is handled gently and efficiently with patented Butterworth tension control devices.

Here is a major step in Finishing Plant economy. Compared to kier bleaching, the new Butterworth JUNIOR Bleaching Unit saves up to 75% in steam alone, and 10% in chemicals. And only one man is needed to run the unit as compared with two men on conventional ranges.

Let us show you how JUNIOR can do a "Man-sized" bleaching job for you. Write or call.

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Representatives in Principal Countries of the World

TABLE 1

PRACTICAL DRAFTS FOR VARIOUS LONG DRAFT ROVING SYSTEMS

Mill	Drafting System	Size of Frame	Draft	Hank Roving Produced	Flyer Speed (rpm)	Staple Length (Inches)
A	Inter-Draft	10x5	12	1.50	.....	.....
E	.....	8x4	15	1.80	1150	Mix of 7/8" and 1 1/8"
	.....	10x5	6.5	.78	800	"
	.....	12x6	5.0	.60	700	"
F	J-3	10x5	9.74	1.50	900	1 1/16
	"	10x5	18.50	2.85	1052	1 1/16
	"	10x4½	21.42	3.30	1052	1 1/16
	"	8x4	29.62	4.60	1100	1 1/16
G	Inter-Draft	10x5	16.8	2.00	750	1⅛
	Super-Draft	8x4	25.2	3.00	1050	1⅛
H	.....	8x4	12.5	1.82	984	1 1/32
L	H&B 4-roll	11x5½	7.20	.90	750	1
	Inter-Draft	10x5	8.00	1.00	875	1
M	J-3	10x5	17.97	3.00	866	1 1/16
N	.....	8x4	20	2.66 and 2.81	.....	1⅜

(*Continued on page* 125)

Yarn Preparation Practices Described at Georgia Meeting

*Staff Report**

SOLID CREELING at the finisher drawing process results in the production of a more even sliver and increase in machine efficiency, according to an analysis of information received from mills reporting on the subject for the recent spring meeting of the Textile Operating Executives of Georgia. Other advantages cited for solid creeling as compared with the spot method of creeling were: solid creeling permits the thorough cleaning of the frames before creeling in a new set of cans; tender can perform more efficiently since less walking is required.

Twenty-eight mills sent in written answers on the question which read as follows: Where two processes of drawing are used, is it advantageous to equip the breakers with yardage knock-off motions and creel the finisher frames solid instead of using spot creeling? State advantages, if any, as to labor saving and sliver evenness.

Sixteen mills favored the solid method of creeling while 10 mills preferred the spot method. Of special interest were tests cited by two mills as follows:

Mill R: We use two-process drawing with yardage knock-off motions on both processes. We block creel the finisher drawing but do not block creel on breaker drawing. Test run on breaker drawing using the two types of creeling gave the following results: Average stops per delivery hour, solid creel, .62; spot creel, 1.90.

Mill JJ: We have made quite a number of time studies and found that the efficiency increases from 7 to 10 per cent by having solid creels. By a corresponding check, our evenness increased due to there not being so much starting of the frames after knocking off for cans being run out.

Drawing frames in 7 of the mills are equipped with yardage knock-off motions and 5 additional mills expressed the opinion that the device should be advantageous.

Life Expectancy of Metallic Rolls. It was the concensus that an average of from eight to ten years of service may be expected from flutes and collars on metallic drawing rolls. Answers ranged anywhere from 5 to 20 years; however, these were the extremes.

Synthetic Rolls on Combers. The use of synthetic detaching and draw box rolls on combers is lim-

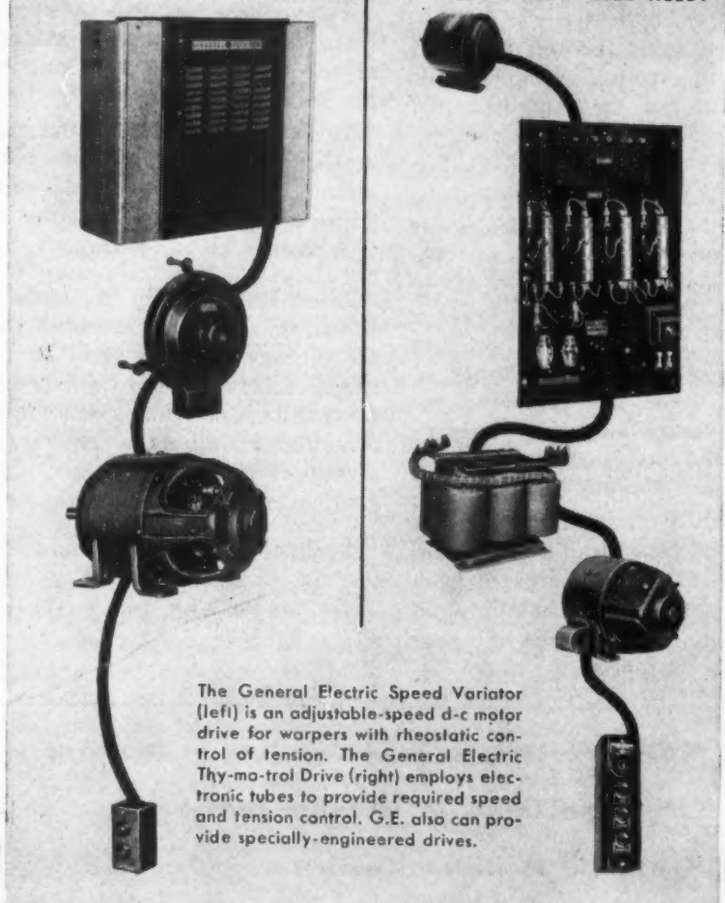
★ **Solid Creeling vs. Spot Creeling at Drawing**

★ **Life Expectancy of Metallic Rolls**

★ **Synthetic Rolls on Combers**

*This is a continuation of the report of the spring meeting of the Textile Operating Executives of Georgia, the first installment of which appears on pages 127, 129 and 133 of the May issue.

THERE'S A G-E WARPER DRIVE TO MEET EVERY MILL NEED!

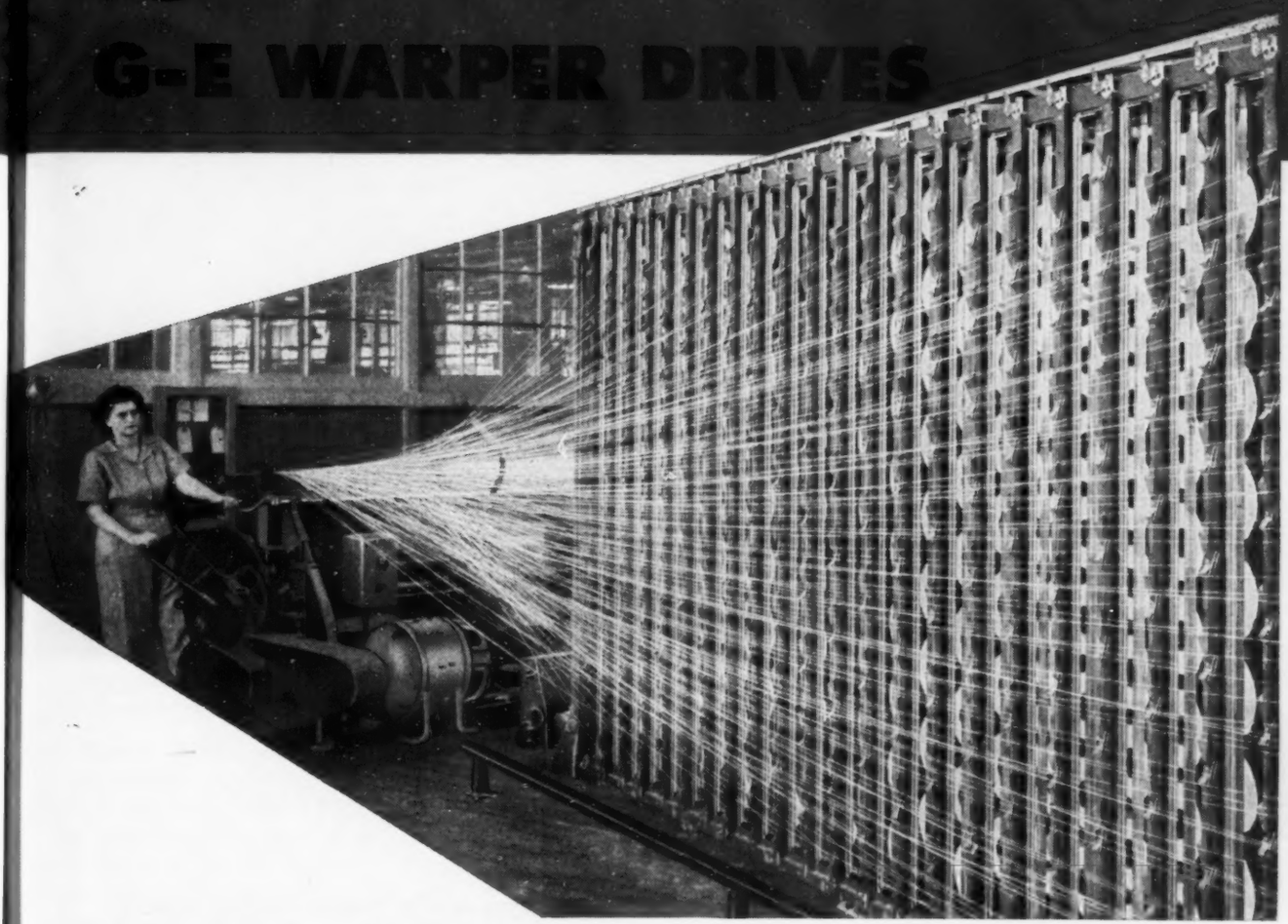


The General Electric Speed Variator (left) is an adjustable-speed d-c motor drive for warpers with rheostatic control of tension. The General Electric Thy-mo-trol Drive (right) employs electronic tubes to provide required speed and tension control. G.E. also can provide specially-engineered drives.

Here's what you get with a G-E Warper Drive!

1. Constant, accurate control of yarn tension
2. Higher warping speeds
3. Smooth, fast acceleration and deceleration
4. Low jogging speed for quick, easy threading
5. Wide speed range
6. Space-saving design
7. Low maintenance cost

right tension on all of them
G-E WARPER DRIVES



Today, warping must be handled faster than ever before. Yet, many operators are faced with the problem of how to step up warping speed and still maintain the close control of yarn tension so necessary to the production of high-quality fabrics. The answer is—a General Electric all-electric Warper Drive.

first This drive makes high-speed warping entirely practical by providing constant, accurate control of tension throughout the beam diameter buildup. Your operator can run his warper at higher speeds with tension within close limits at all times.

second You get more yarn per beam with a G-E Warper Drive because the top limit in tension can be approached without risking loss of adequate yarn "stretch."

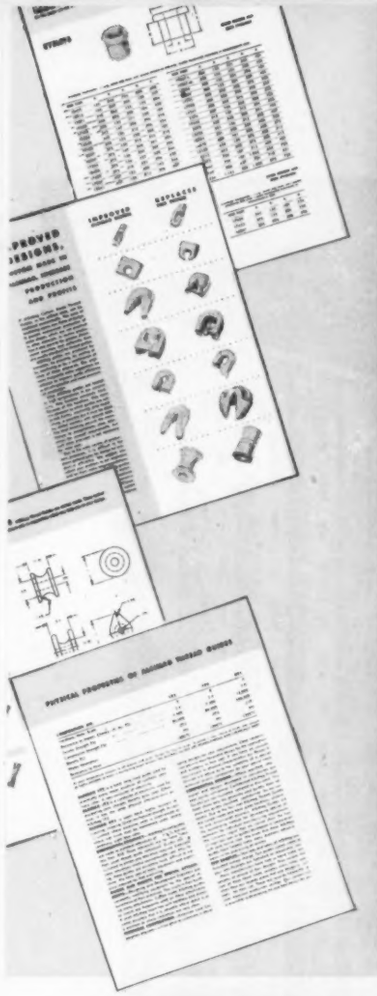
third The warper can be stopped and started faster, thereby cutting down on the time lost in finding and tieing broken ends. Your production is up and the cost of finished cloth is down!

ASK YOUR WARPER MANUFACTURER!—Many warper manufacturers are working with General Electric textile mill specialists to help you get more and better warp beams through the use of modern warpers equipped with all-electric drives. One of them will be glad to make a study of your warping problems. For more detailed information on G-E Warper Drives, write today for a copy of GEA-5258. *Apparatus Dept., General Electric Company, Schenectady 5, N. Y.*

DRIVE SYSTEMS FOR TEXTILE MILLS

GENERAL ELECTRIC

854-4



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Helpful new Bulletin 491 on AlSiMag Custom Made Thread Guides contains pictures, dimensional line drawings, physical properties, list of open designs with detailed measurements and is chock full of useful information for any textile operating executive. If you would like a copy, use the convenient request coupon.

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★ **Comber Needles**
★ **Draft Limits on Roving**
★ **Bunches on Filling**

ited. Four mills rendered opinions on the subject. One mill uses synthetic rolls on back rolls in the draw box, but front rolls are leather covered. Another mill is using synthetic detaching and draw box rolls with the exception of the front draw box roll. Synthetic front detaching rolls are being used in a third mill, but leather covered top rolls are preferred for draw boxes. Unsatisfactory results with synthetic rolls was the report of the fourth mill.

Comber Needles. Flat needles are preferred for the top comb. There seems to be a variety of opinions, however, regarding the needle that will give the best service in the half lap. One mill recommends Worral needles; another prefers the round needle; the flat type needle is used by a third mill and preferred by the fourth.

Draft Limits on Roving. Practical drafts, according to Georgia mill men, for the various types of long draft roving are set forth in **Table 1.** In the majority of instances information reported was based on everyday operation, however, a few mills did cite results of tests made to ascertain the highest practical drafts.

Bunches on Filling. Georgia mills appear to be split approximately 50-50 on their preference for long flat bunches (¾" to 1") and bunches less than ½". However, an analysis of replies indicates that the type of bunch selected for use at a particular mill depends on the yarn numbers being made. Normally the practice is to use the long flat bunch of coarse yarns (8s and below) and a bunch of ½" or less on finer yarns.

There was no agreement among the mills as to how high a bunch can be on a quill without giving trouble in the weave room. Typical of the varied answers received are the following:

Mill A: Not over ¼".

TABLE 1 (Continued)

PRACTICAL DRAFTS FOR VARIOUS LONG DRAFT ROVING SYSTEMS

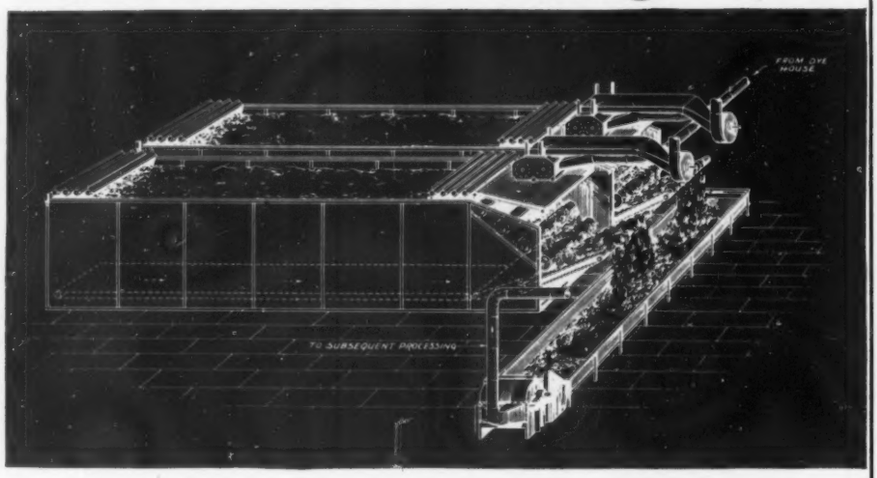
Mill	Drafting System	Size of Frame	Draft	Hank Roving Produced	Flyer Speed (rpm)	Staple Length (Inches)
O	Inter-Draft	10x5	17.30	2.25	835	1 1/16
P	Inter-Draft	9x4½	10	.....	.....	.....
	Super-Draft	8x4	16	.....	.....	.....
Q	H&B 5-roll	10x5	14.4	2.00	Mfrs. Std.	1
	" "	8x4	15.2	2.10	"	.....
	Inter-Draft	10x5	9.4	1.20	"	50-50 blend of 1 1/8" cotton and strips
R	Super-Draft	8x4	47	6.00	1200	1
S	Super-Draft	9x4½	13.6	1.50	920	⅞
	" "	8x4	13.6	1.50	1050	⅞
	" "	9x4½	14.4	2.00	920	1 -1⅛
	" "	9x4½	14.4	2.00	820	1¼-1⅜
	" "	8x4	31.6	4.40	1050	1 -1⅜
	H&B 3-roll	7x3½	6.60	6.60	1150	1 -1⅜
U	FS-2	10x5	18.8	.....	815	.....
V	Inter-Draft	9x4½	5.50	.80	1100	50-50 mix
	"	9x4½	8.34	1.10	1100	1 and 1 1/8
	"	9x4½	10.38	1.50	1100	"
	"	9x4½	16.66	2.50	1100	"
W	Inter-Draft	9x4½	6.72 to 13.6	.80 to 1.60	914	⅞ to 1⅛
	Super-Draft	8x4	13.6 to 25.2	1.60 to 3.00	1074	"
Y	Super-Draft	9x4½	18	.....	950	1
AA	Super-Draft	8x3½	30.7	4.00	1191	1
	" "	8x3½	23.0	3.00	1191	1
	" "	9x4½	21.8	2.85	990	1
	" "	9x4½	10.5	1.37	990	1
	Long Draft	11x5½	7.6	1.00	822	1
	" "	11x5½	6.4	.83	822	1
	" "	11x5½	3.8	.50	788	1
BB	.....	11x5½	4.00 to 7.00	.50 to 1.00	700	1
	.....	9x4⅝	9.00 to 12.00	1.30 to 1.75	950	1
DD	Conventional	10x5	6.23	.....	.....	1
	.....	9x4½	5.00	.....	.....	.....
EE	Conventional	12x6	3.90	.50	580	.....
	"	12x6	4.64	.75	617	.....
	"	12x6	7.02	.90	675	.....
	"	12x6	7.02	.90	675	.....
	Inter-Draft	10x5	8.57	1.10	685	.....
	"	10x5	11.70	1.50	889	.....
	"	10x5	10.75	1.60	960	.....
	"	10x5	13.44	2.00	980	.....
FF	3-roll and 4-roll	10x5	11.55	.....	780	1
	Super-Draft	8x3½	33.00	.....	1200	.....
HH	Inter-Draft	9x4½	15	2.50	950	1
	Super-Draft	8x4	20	5.00	1100	1
II	Inter-Draft	10x5	6.48 to 10.80	.90 to 1.50	861	1 1/8 to 1
JJ	.....	12x6	3.60	.50	625	⅞
	.....	12x6	5.04	.70	625	⅞
	.....	10x5¼	6.12	.85	753	⅞
	.....	10x5¼	12.59	1.75	753	⅞
	.....	8x4	17	2.50	1025	⅞
	.....	8x4	19	3.00	1025	⅞
KK	Super-Draft	8x3½	27	3.85	1200	.....
	.....	10x5	11.60	1.55	820	.....

TEXTILE MACHINERY and

PUBLISHED BI-MONTHLY FOR TEXTILE MILL EXECUTIVES AND OPERATING PERSONNEL BY PROCTOR & SCHWARTZ, INC.

• JUNE • 1949 •

Roller Distributor Found Applicable for Uniform Color Blending . . . . .



Originally conceived simply for blending various types or grades of stock—the recently developed Proctor roller distributor has been found extremely well suited to the blending of various dye lots of stocks.

This modern system provides a more accurate means for achieving uniformity in the color blend than anything ever before used for this purpose.

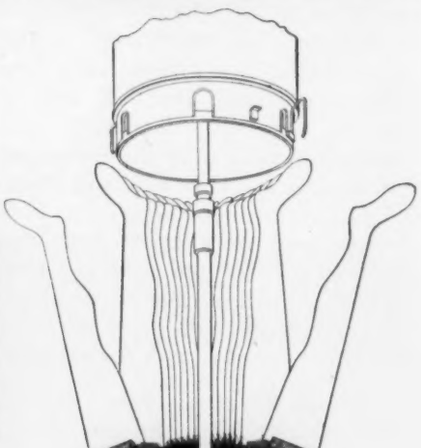
In order to overcome the slight variance that occurs in dye lots of the same color—these lots are carried by pipe from the discharge end of the dyehouse dryer to either condenser (shown in the typical plan view above). From the condenser, the stock is deposited onto the roller distributor, which deposits it in the blending box, building up a sandwich blend. When the blend is built up to sufficient height, the conveyor which forms the base of the blending box, moves forward and break-down rolls, equipped with retracting pins, pick off the stock from top to bottom and feed it to the picker.

The result is a complete and thorough blend of the several dye-lots in such a way as to assure one even shade for subsequent processing.

Variations of this system may be designed to meet the requirements of any mill with a color blending —or "shade-evening" problem.

This application represents one more use for the highly versatile blending equipment developed by Proctor engineers. Blending of stocks for a wide variety of reasons has taken on new importance to the textile industry within the last several years. Proctor engineering skill has not only kept pace with that need—but in many instances, set the pace by providing modern equipment to make possible blending operations never before considered.

If you have a blending problem of any kind—Proctor engineering skill can help. Write us about your problem today.



PROCTOR PREBOARDING EQUIPMENT REDESIGNED FOR MECHANICAL SIMPLICITY

Improvements recently incorporated in the design of Proctor preboarding equipment have greatly simplified its operation over earlier machines.

The new design eliminates the three hydraulic pistons that were used to raise and lower the boards. These pistons are replaced by a cam which operates mechanically.

On machines designed and built previous to this improvement all of the boards were thrown out at once after the chamber had risen. With the new "dual-board take-out device," the boards are brought out individually and continuously at the two boarding positions on the machine. This arrangement cuts wear and maintenance to a minimum.

These improvements may be readily incorporated in the older machines.

Write for Bulletin #337 which explains in detail how the newly designed equipment operates.

DRYING EQUIPMENT News

RECLOTHING PAYS OFF IN IMPROVED PRODUCTION

It stands to reason that sharp wire on card and garnett cylinders that are "true" and in proper alignment improves production. Not only is output better—but the quality of the work produced by the machines is vastly improved.

In order to help you keep your cards and garnetts operating at peak efficiency, Proctor & Schwartz, Inc. maintains reclothing service at five convenient locations throughout the country. Your cylinders may be serviced and reclothed at the main plant in Philadelphia or in reclothing shops in Newton Upper Falls, Mass., Cohoes, N. Y., Chicago, Ill., or San Francisco, Cal.

Consider the condition of your equipment today—then investigate Proctor reclothing service. You'll find it will pay for itself many times over. Write for details to the main office—or any of the reclothing shops.

WHEN YOU NEED INFORMATION ON PROCTOR EQUIPMENT *Quickly*

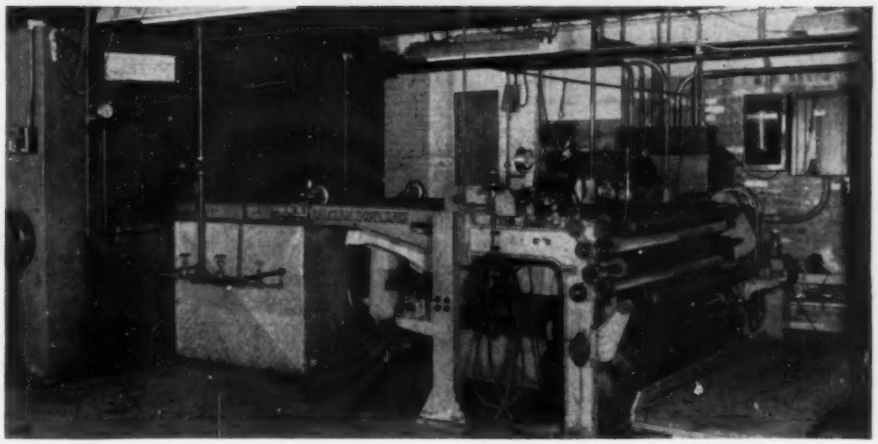
turn to either Textile World Pre-Filed Catalogs—or Davison's Textile Catalogs.

In both of these pre-filed catalog services you'll find 16 pages of information to help answer your questions on Proctor equipment.

Of course, no catalog or directory advertising can answer your most detailed queries. However, when you want basic information of what Proctor makes and for what purposes . . . you'll find it in these catalogs. When time permits or your information must be quite specific—of course, we're always glad to hear from you . . . so write us about your individual problems.

Much Proctor drying equipment and textile machinery is covered in full or in part by patents or patents pending.

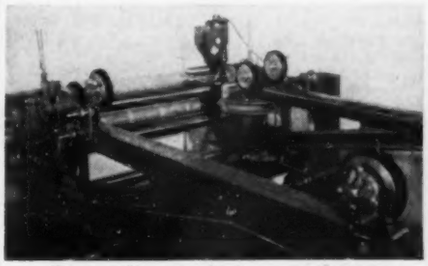
Dalglish Pin Tenter Meets Demand for Quality Finishing at High Speed



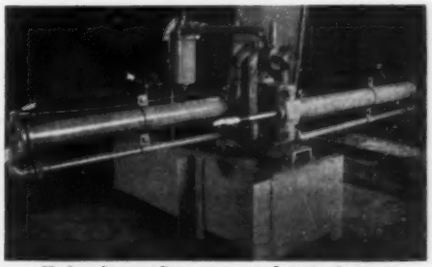
Textile men have long sought a means for finishing fabrics that would provide the full round hand of custom finished fabrics—at high speed to meet production demands. As recent installations of the Dalglish pin tenter are checked it becomes increasingly apparent that this equipment is answering that long standing need.

Originally developed in Scotland by John Dalglish & Sons, and now manufactured and sold in America under license, by Proctor & Schwartz, this equipment provides a means for high output and quality control in fabric finishing.

The quality and "hand" of the finished goods is a direct result of the perfected overfeeding device, combined with other mechanical features and a balanced, high speed drying system. Especially applicable for use in finishing resin treated fabrics, the drying system is so designed that resin migration is prevented — further assurance of quality finishing. Because of control possible with this system, results established on one fabric can be reproduced on the next run, without question. Write for complete details.



Close up shows overfeeding gear of micrometer accuracy, which contributes largely to quality finishing.



Hydraulic guiding system of instantaneous sensitivity—guiding to an accuracy of 1/16" to 100 yards per minute.

Proctor & Schwartz, Inc. • 610 TABOR ROAD • *Philadelphia 20, Pa.*

"Our Du Pont systems speed up processes . . . produce quality bleaching at considerable savings"

Lowell Bleachery South plant, at Griffin, Ga.

Read why . . . Lowell Bleachery South installed a second Du Pont Continuous Peroxide System

LOWELL BLEACHERY SOUTH

BLEACHERS, DYERS, NAPPERS AND FINISHERS OF

COTTON PIECE GOODS AND FABRICS

JNO. H. CHEATHAM, PRES. & TREAS.
G. N. MURRAY, VICE-PRES. & GEN'L
L. F. DULLIGAN, SUPT. BLEACHERY
O. E. FRICK, SUPT. DYE PLANT

GRIFFIN, GA.

NEW YORK OFFICE
A. T. HEMMINGER JR., MGR.
320 BROADWAY

February 18, 1949

E. I. Du Pont de Nemours & Company, Inc.
Wilmington, Delaware

Gentlemen:

Our company was among the first to install the continuous bleaching process in 1941 when a Two-Stage Du Pont Continuous Rope Bleaching Range was installed in our bleachery. This has been in continuous operation since that date and the performance has more than met our expectations. Through the use of this equipment we have been able not only to speed up our processes but to carry out high quality bleaching at a considerable saving in cost.

An important part of our post-war moderalization and expansion program called for the installation of equipment for processing medium and heavy weight goods for dyeing. We made a thorough investigation of all the available processes and found that the Du Pont Open Width Bleaching System was best suited to our requirements.

Consequently, in 1948, we installed a complete two-stage open width bleaching range including drying cans and it was put into operation about November 1, 1948 and has been going continuously since that time. Medium and heavy goods processed in our open width system are now being dyed in vat and sulphur colors without difficulty, both pad jig and continuous method being used with highly satisfactory results.

Yours very truly,

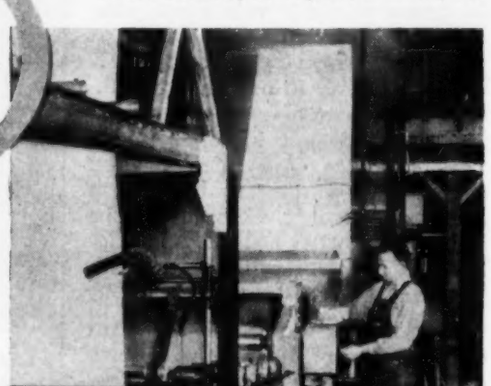
LOWELL BLEACHERY SOUTH

G N Murray

Vice President

GNM/H

MEMBER OF NATIONAL ASSOCIATION OF FINISHERS OF TEXTILE FABRICS



New Du Pont Open Width Continuous Peroxide Bleaching System in operation at Lowell Bleachery South.

• • •

TO BLEACH MORE GOODS FASTER AT LOWER COST

There's a Du Pont System to meet your specific requirements. Du Pont technical service men will help you select equipment and start up your process. Just write E. I. du Pont de Nemours & Co. (Inc.), Electrochemicals Dept., Wilmington 98, Delaware.

DU PONT CONTINUOUS PEROXIDE BLEACHING

DU PONT

REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Mill B: This depends on where the feeler is set. It can be set up to take a high bunch or a low bunch. If the weave room would check setting of feelers more closely, we feel that we would have less bunch trouble.

Mill C: ½".

Mill D: ¾" should be the maximum height.

Mill F: Good results are obtained at this mill by having the bunch not more than ½" long on the quill.

Mill H: On our work trouble begins to develop when bunch gets ¾" from base of bobbin.

Numerous methods were given for determining the proper number of yards for a bunch. Nine of the mills reported the use of the old familiar rule: Three times the width of the fabric being woven. Other answers: five times width of fabric being woven; width of cloth plus 9 feet; four times the width of the loom; three times width of cloth plus 1½ yards; three times width of widest fabric loom will run plus 36 inches.

Oil-Less Cap Bars and Saddles. Only three mills reported experience with nylon, synthetic, or metallic oil-less top roll cap bars on spinning, and in each instance the report was unfavorable. In this connection, **Mill BB** is testing cap bars and saddles equipped with wooden oil-less bearings. These had been in operation about two weeks at the time the report was made and, according to the management, appear to be very satisfactory.

Experience of six mills using saddles equipped with oil-less bearings is indicated below:

Mill A: Metallic oil-less caps on saddles are very satisfactory.

Mill B: Two frames equipped with oil-less type saddles. After several months' use top roll failed to turn when starting frame. Still using saddles but oil them the same as conventional saddles.

Mill E: One frame equipped with nylon oil-less saddles has been running four months without oil and is giving entire satisfaction.

Mill I: One frame equipped with saddles fitted with metallic oil-less front roll bearings and wooden bearings for middle and back rolls. Oil bearings once a week with a light oil and have found them satisfactory thus far. Front saddle bearing has an oil reservoir.

Mill EE: Nine frames with saddles with synthetic oil-less bearings have been running for five months with satisfactory results. They require no oiling and do not wear out the nicks on the front roller. Cockled yarn produced is less than that made with dry saddles.

Mill JJ: Metallic oil-less type saddles on all spinning frames. Cut rolls due to worn saddles have been entirely eliminated. Some bearings have been running since 1941 and none replaced to date.

Reducing Clearer Waste in Yarn. The use of the revolving top front clearers, either alone or in combination with other types of clearers, was by far the most popular recommendation for reducing to a minimum the amount of clearer waste getting into yarn.

Of the 36 mills reporting on the question, 27 of these mills have spinning frames equipped with revolving top front clearers. Ten of the mills use the combination of revolving top front clearers, back flat clearers, and back under clearers; five mills use the combination of revolving top front clearers and back flat clearers; while eight mills use the revolving top front clearer only. Replies of the four remaining mills using revolving top front clearers are presented herewith:

Mill L: We have our spinners clean flat clearers twice every eight hours; revolving top clearers once every eight hours and back under clearers every 16 hours.

Mill R: We believe the best method for reducing to a minimum clearer waste getting into the yarn by using round revolving top front clearers, back flat clearers, and back round under clearers. On 3s to 10s, clean every 8 hours; 10s through 14s, every 40 hours; 14s through 22.5s, every 60 hours.

Mill T: We have experience with flat top clearers and revolving top front clearers only, and if flat clearers are picked one time per shift and revolving clearers two times per week on 120-hour operation, we find it to be satisfactory.

Mill Z: On coarse counts, 15s and under, we use revolving clearers and flat top clearers and set up schedule of cleaning according to type of cotton to insure that these clearers are kept clean and the waste does not get heavy enough to feed into the yarn.

Cleaning Spinning Frames. Georgia mill men were asked to describe their methods of cleaning in spinning, with particular reference to (1) roll cleaning; (2) procedure for blowing off frames; (3) experience with automatic ceiling cleaning machines and with the use of vacuum machines for cleaning spinning frames and ceilings.

Roll Cleaning. Twelve of the 34 mills answering this question assign roll cleaning to the spinners. Fifteen mills use special cleaners, and seven mills use a combination arrangement whereby the spinners are responsible for certain cleaning while special cleaners handle certain other cleaning operations.

Cleaning schedules vary from mill to mill. **Mill D** has special cleaners assigned to clean the steel rolls, pick top rolls, clean pencil rolls, pick revolving clearers, clean back scavenger rolls, pick stands, brush rails and clean bottom creels. Schedule for these cleaners is as follows: Clean top rolls every 24 hours; clean pencil rolls once every 24 hours; clean revolving clearers once every 120 hours; clean back scavenger rolls every 120 hours; wipe out bottom

★ **Oil-less Cap Bars and Saddles**
★ **Reducing Clearer Waste in Yarn**
★ **Methods of Cleaning Rolls on Spinning**

Good from any viewpoint

COLUMBIA CHEMICALS

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SILENE EF
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CALCENE T
(Precipitated Calcium Carbonate)
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(High Test Calcium Hypochlorite)
PITTCIDE
(Special Calcium Hypochlorite)
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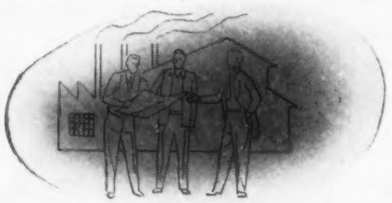
PACIFIC CRYSTALS
(Sodium Sesquicarbonate)

FROM THAT OF YOUR MANAGEMENT—

Columbia policies foster profitable business relationships.



FROM THAT OF YOUR TECHNICAL STAFF—

Columbia manufacturing controls eliminate production difficulties arising out of variances in quality and grading.

FROM THAT OF YOUR PURCHASING DEPARTMENT—

Columbia plant locations and expeditious handling of your inquiries and orders assure fast service.

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Yes, from any viewpoint, Columbia offers definite advantages as your source of supply for alkalies, chlorine and related chemical specialties. Pittsburgh Plate Glass Company, Columbia Chemical Division, Fifth at Bellefield, Pittsburgh 13, Pa.

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PITTSBURGH PLATE GLASS COMPANY

creels once every 120 hours; clean ring rails once every 60 hours; and clean steel rolls once every 120 hours.

Roll picking is assigned to the spinners at **Mill F.** Rolls are picked every 24 hours, the work being equally divided between spinners on the three shifts.

At **Mill V** the spinners are assigned to picking the top rolls and the front steel rolls daily. A special operative cleans the bottom back and middle steel rolls with a pneumatic roll picker, cleaning 25 sides each eight hours.

There is apparently no standard practice regarding procedure for cleaning of steel rolls. The majority of the mills reporting on the question use hand brushes with wire bristles, however, 14 mills are using rotary (motor driven) brushes and/or mechanical roll pickers. Frequencies cited ranged anywhere from every 48 hours to once each year.

TABLE 2
Cleaning Schedule for Spinning
(Submitted by Mill Y)

1. Run out thread guides every hour.
2. Pick top rolls once each shift.
3. Pick separators once each shift.
4. Brush spindle and base rail 4 times each shift.
5. Pick top clearers 4 times each shift.
6. Wipe out back sides twice each shift.
7. Clean scavenger rolls each doff.
8. Pick around and clean front roll stands, roving rods and roving stands once each shift.
9. Brush ring rails weekly (120 hours).
10. Wipe roving, top and bottom, each 40 hours.
11. Clean back scavenger rolls weekly.
12. Clean weights weekly.
13. Wipe back of base rail each 40 hours.
14. Brush spindle collars each 40 hours.
15. All other parts on week-end clean up.
16. Wipe top of roving once each shift.
17. Head ends brushed each 8 hours.
18. Frames blown off once each week.
19. Brush top clearers once each 3 months.
20. Clean steel rolls once each week with pneumatic roll cleaner.

★ **Blowing Off Spinning Frames**
★ **Eliminating "Wild Yarn" at Spoolers**
★ **Stationary Brushes on B-C Spoolers**

Blowing Off Frames. Mills also differed in their opinions as to the best method for blowing off frames from the standpoint of less slubs in yarn. Eight mills blow off their frames daily and stop the machines while this is done. Eleven mills wait until the week end to blow off their machines. Seven mills blow off their spinning frames while they are in operation. For example, **Mill H** (spinning 13s yarn) blows off machines four times per shift while frames are running. The amount of air used is restricted and they do not blow above the ring rails.

If the operator is properly trained and the cleaning cycle is often enough, best results can be obtained by blowing off spinning frames while they are in operation according to **Mill Z.** The schedule depends on the size yarn, type stock, etc. The schedule at this mill (spinning 23s yarn) is once every two hours.

Compressed air is not used in two of the mills for cleaning frames.

Automatic ceiling cleaning machines have not been installed in any of the mills responding to this question. One mill reported unsatisfactory experience with machines for cleaning spinning frames by vacuum.

The very complete cleaning schedule for spinning as furnished by **Mill Y** is presented in **Table 2.**

Eliminating "Wild Yarn" at Spoolers and Warpers. Many excellent suggestions were submitted to aid in the elimination of wild yarn on Barber-Colman spoolers and warpers. **Table 3** is a listing of steps taken by **Mill II** in overcoming this problem.

Stationary Brushes on B-C Spoolers. Experiences with the application of stationary brushes on Barber-Colman spoolers to keep chokes off the drums, were cited

TABLE 3
How to Prevent Wild Yarn at Spoolers
(Submitted by Mill II)

1. Keep machines clean by blowing off spoolers twice each shift and blowing off warpers after each creel.
2. Check knotter settings at least once each week.
3. Keep thread clamps well cleaned and adjusted.
4. Keep good blades in thread clamps.
5. Check presser lever springs each time traveler is blown off.
6. Check cheese arm plows for worn and rough places once each shift.
7. Check for scarred and worn rollers.
8. Check for scarred or clogged sleek tube and clean two or three times per week.
9. Clean rotary brush every four hours and replace bad or worn brushes promptly.
10. Keep cheese cores in line and where they will roll freely.
11. Keep cheese core arms in line where end will not get off on side of cheese.
12. When pieces are put up to replace full cheese, see that the pieces are not tangled and that ends hang freely before the traveler reaches them.
13. Break off doffer tailings from each bobbin of yarn before being spooled.
14. When an end breaks down before running out, see that the bobbin containing that end is lifted out by hand to prevent a doubling or perhaps the tangling of several ends.
15. Blow off section of spooler where wild yarn has collected (due to the running of a lap) before traveler gets to any part of this section to tie up.
16. Keep snick plates properly adjusted.
17. Stop warper and pick out by hand any wild yarn that collects in rake or on drop wires.
18. Check and maintain a good air pressure on spoolers at all times.

on all anti-friction bearing spindles - - -

Whitin ANNOUNCES

Whitin-SKF ROLLER BEARING SPINDLES ADOPTED AS STANDARD

Cylindrical Type, medium duty—for use with wooden bobbins and paper tubes.
Oil Cushion Ring Brake Type, heavy duty—provides effective damping action and additional flexibility for heavy out-of-balance loads.

Behind this decision to standardize on Whitin-SKF are long years of exhaustive tests and experience with many installations in this country and abroad.

Over these years many types of anti-friction bearing spindles have been introduced, but the SKF Roller Bearing Bolster Type is the only one that has given satisfactory service for over 25 years.

Check these advantages:

- *Simplicity and ease of replacement* SKF Bolster can be removed and replaced without replacing case or spindle blade
- *Power savings averaging 15%*
- *More uniform twist . . . higher breaking yarn strength . . . less ends down*
- *Oil throwing eliminated* . . . resulting in cleanliness, thereby requiring less cleaning and affording greater tape life

Our engineers can show you how replacement with Whitin-SKF Roller Bearing Spindles can add to your profits. SKF Industries, Inc., Philadelphia 32, Pa. 6594

Textile Bearings engineered by SKF

by ten mills, eight of them being highly satisfactory.

Mill C: We estimate that the installation of brushes on our spoolers reduced chokes by 75%. Specially constructed brushes approximately 4 feet long and 1 inch wide are mounted on adjustable brackets on the inside of the spooler frame.

Mill R: We have had only one side (117 spindles) equipped with stationary brushes for approximately 4 weeks. So far, we find that these brushes reduce drum laps by approximately 99%. We are in process of installing another side. Present method of applying brushes is by bolting brush to lint guard. We are working on a method of removing lint guards and fastening brushes for each side of spooler with a piece of 1" flat iron 7½" long, letting this flat iron rest on lint guard support. We use No. 3289 spooler brushes.

Mill FF: Before installing stationary brushes on spoolers, we averaged at least two laps per spooler per shift. We placed brushes on the spoolers four months ago and have averaged one lap per spooler per month. We drilled three holes in the wood section of the brush and bolted it to the center guard with stove bolts. We use a hair brush with 1½" trim.

Two mills have experimented with felt and flannel pads and report that results are more satisfactory than with brushes.

Stationary brushes caused more gouts in the yarn, according to one of the mills reporting unsatisfactory experience with the arrangement. It cut down on the suction on the cleaning system, causing spooler to get dirtier than usual. Another mill reported that brushes accumulate a lot of waste, making it practically impossible to properly clean the spooler. It was the opinion of this same mill, however, that the brush reduced chokes by 40%.

Overhauling Spinning and Scrubbing Rolls. A comparison of practices on overhauling and scrubbing rolls in spinning is presented in **Table 4.**

★ **Overhauling Spinning and Scrubbing Rolls**
★ **Small Pulley Drives on Spinning**
★ **Preventing Singlings and Doublings on Twisters**

Small Pulley Drives on Spinning. Only five mills reported results obtained on spinning frames equipped with shafts and small pulleys instead of cylinders. Three of these mills reported a decrease in maintenance cost; the other two mills were unable to make statements on this matter.

An increase in speed of from 10 to 15% has been possible at three of the mills; two mills have maintained the speed of their frames the same as when equipped with cylinders. Four mills were of the opinion that the twist per inch is more uniform.

With regard to uniformity of spindle speeds, four of the mills expressed the opinion that speeds are more uniform with both full and empty bobbins than they were when frames were equipped with cylinders.

Preventing Singling and Doublings on Twisters. Several suggestions were made for preventing singlings and doublings on warp

(*Continued on page 225*)

TABLE 4

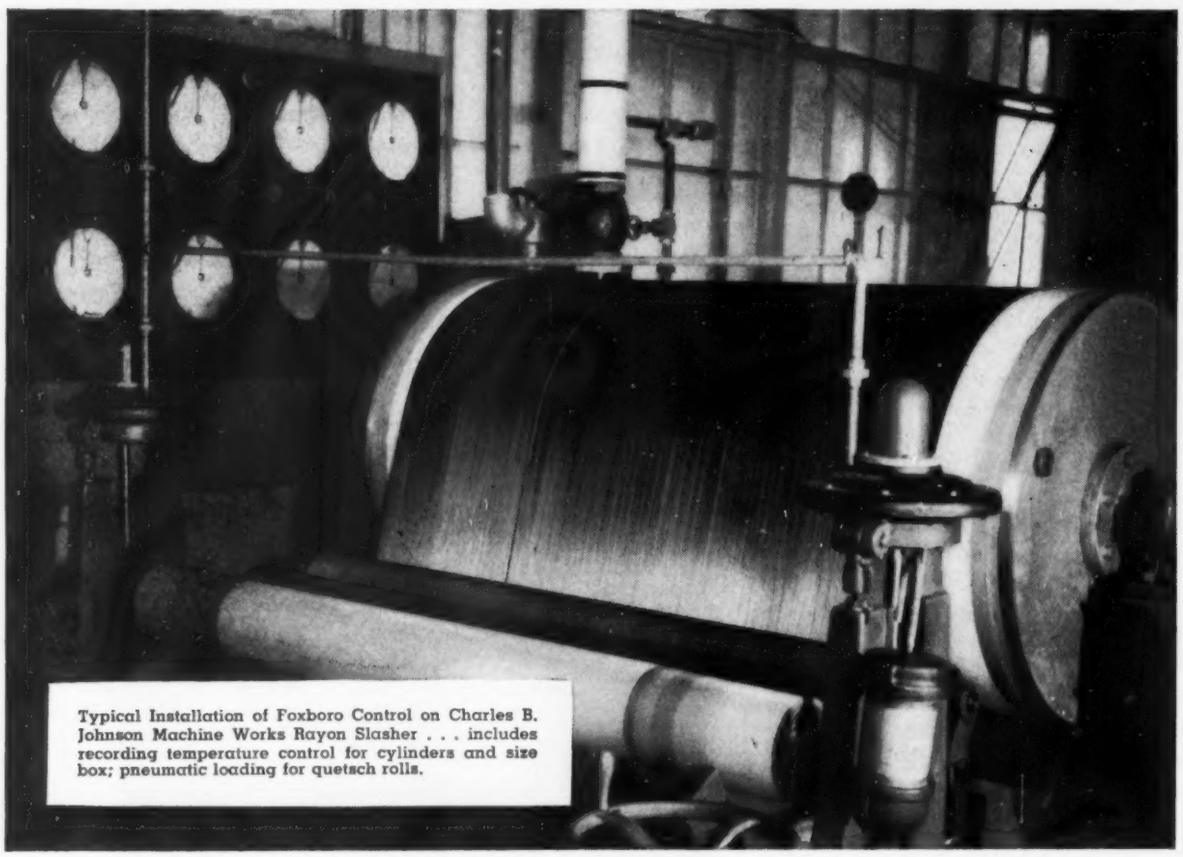
Overhauling Spinning and Scrubbing Rolls

Mill	Overhaul Frequency	Scrubs Rolls Between Overhauls	Frequency	Man Hours Per Frame Major Overhaul	Man Hours Per Frame Minor Overhaul
A	12 mos.	Yes	6 mos.	12	17
C	3744 hrs.	No	.....	8[1]	8[1]
F	9 mos.	No	.....	16	.....
H	5000 hrs.	No	.....	16	.....
I	No Schedule	Yes	6 mos.	16	10
J	2080 hrs.	Yes	1040 hrs.	32	16
K	12 mos.	Yes[2]	.....	10-14	10
L	50,000 to 70,000 hrs.	No	.....	.....	.....
M	7000 hrs.	No	.....	24	.....
N	6000 hrs.	Yes	3000 hrs.	32	16
P	7488 hrs.	No	.....	16	12
Q	6000 hrs.	.....	.....	.....	20-28
R	4000 hrs.	Yes	See Note 3	12-16	13-16
S	6000 hrs.	No	.....	24	.....
T	12 mos.	No	.....	50	.....
V	7400 hrs.	Yes	3 mos.	16	8
W	12 mos.	Yes	1380 hrs.	8	8
X	1920 hrs.	No	.....	8	12
Y	6000 hrs.	Yes	2000 hrs.	20	10
Z	8320 hrs.	Yes	4160 hrs.	48	21
AA	5000 hrs.	No	.....	20	8
BB	6300 hrs.	Yes	3150 hrs.	32-40	16
CC	12 mos.	Yes	6 mos.	See Note 4	7.6
DD	6200 hrs.	Yes	3100 hrs.	36	16
EE	6000 hrs.	Yes	3000 hrs.	16	16
FF	2080 hrs.	No	.....	12	12
GG	6140 hrs.	Yes	2080 hrs.	40[5]	.....
HH	9 mos.	No	.....	24	12
II	6800 hrs.	Yes	6 mos.	32	16
JJ	5500 hrs.	Yes	6 mos.	24	8
KK	12 mos.	Yes	5 mos.	32	12

1. Overhauling and roll scrubbing crews work together, and some work is done by roll scrubbers (such as dismantling the frame, replacing aprons, cleaning gears, etc.) that might be done by overhauler under other conditions.
2. Minor overhaul check at any shut-down period (vacation week, Christmas, etc.).
3. Yarns 3s through 12s, 1280 hrs.; 13s through 30s, 2880 hrs.
4. Overhauling done by contractor.
5. Includes 16 hours for roll scrubbing.

"UP" SLASHER EFFICIENCY

with better-engineered temperature control



Typical Installation of Foxboro Control on Charles B. Johnson Machine Works Rayon Slasher . . . includes recording temperature control for cylinders and size box; pneumatic loading for quetsch rolls.

Slasher drying cylinders can be operated more easily and with definite cost savings, under Foxboro recording temperature control. Installations are simpler, measurement and control more accurate. These better engineered control systems are based on the unequalled speed and precision of the Foxboro On-Off Controller. Consider the advantages of this and other Foxboro slasher control systems. See how they "up" slasher efficiency—*and product quality*—economically and easily. Write for complete details. **The Foxboro Company, 18 Neponset Avenue, Foxboro, Mass., U. S. A.**

Check these four benefits of Foxboro Slasher Drying Control:

1. *Condensate positively ejected . . . no need for vacuum or compressed air, even at lowest operating temperatures.* **2.** *Lower initial and maintenance cost.* **3.** *Sensitive bulb of controller is located WITHIN the cylinder for fastest response.* **4.** *Closer control of cylinder drying temperatures is assured by the unique performance of the Foxboro On-Off Controller . . . fast, accurate, free from complicated adjustments.*

Better - engineered control for slashers

Recording Size Cooking Control

Recording Size Storage Control

Size Box Level Control

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Harvey Warns Georgia Executives to

Take Active Interest in Politics

Staff Report

THERE is the danger that textile men may stress technical research as a cure-all for the problems facing industry, but representatives of the textile industry cannot be either ignorant or indifferent to the present tendencies of increasing government controls, R. D. Harvey of Pepperell Manufacturing Company told the assembled members of the Cotton Manufacturers Association of Georgia at the annual convention in Daytona Beach, Fla., on May 5.

Mr. Harvey, retiring president of the association, cautioned that industrialists must be ever-mindful that the power to tax is the power to destroy, pointing out that it has been observed in various countries that when the tax burden rises to something like twenty-five per cent of the national income, a law of diminishing return sets in because some people who could increase their incomes by new efforts are discouraged.

Speaking in strong language he referred to pressure groups and their activity in politics, saying that "if the pressure groups are going to take a tremendous interest in politics and we are not going to take any interest in politics, it is absolutely certain that no matter how these pressure groups may protest that they are for the private enterprise system, it will be destroyed——and it will pretty well be our fault if it is.

"An intelligent, active interest in politics has become just as much a part of our job and just as much a part of the management of business as any of the other important departments of business."

N. Barnard Murphy

Request Textile School Name Change. A resolution was adopted which requested the Board of Regents and the president of Georgia Institute of Technology to change the name of the textile school at Georgia Tech from the A. French Textile School to the Harrison Hightower Textile School in honor of the late W. H. Hightower of Thomaston, Ga., who was instrumental in starting The Textile Education Foundation, Inc., in Georgia.

The Foundation is the organization which has done much for the textile school at Georgia Tech and which has collected funds with which to equip the new textile building. This new textile building already carries the name Harrison Hightower Building.

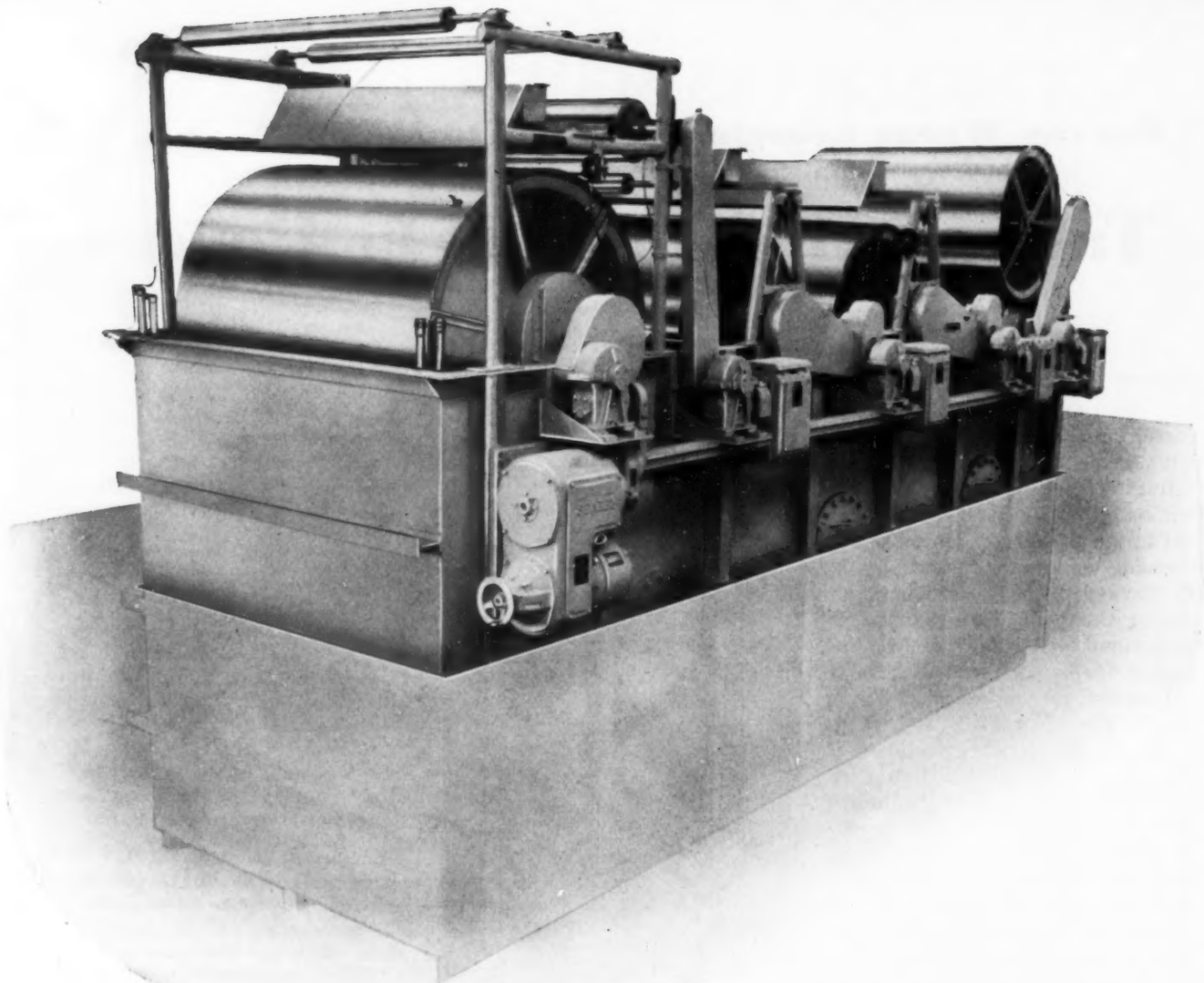
Murphy Heads Association. N. Barnard Murphy, vice-president and general manager of Riegel Textile Corporation, Trion (Ga.) Division, was elected president of the association, succeeding Mr. Harvey of Pepperell. Mr. Murphy previously had served the association as director, treasurer, and vice-president, and was also president of The Textile Education Foundation for one year. He is the thirty-eighth president of the association.

Other officers elected were L. G. Hardman, Jr., of Harmony Grove Mills, Inc., Commerce, as vice-president; Henry W. Swift of Swift Spinning Mills, Columbus, as treasurer; T. M. Forbes, executive vice-president (reelected); and Frank L. Carter, secretary (reelected).

Employee Relations. L. R. Boulware, vice-president of General Electric Company, spoke on employee relations, explaining the broad program which has been adopted by the company. He emphasized that employees do not appreciate or get the full significance that business and management are working for the welfare of the employees — therefore employees misinterpret the actions of management. He called for adequate two-way communications between foremen and employees, advising that it is necessary to do a selling job on the employees.

Carter and Swift

Hardman and Forbes



Accent on EFFICIENCY

THE setting and boiling-off of cloth in preparation for dyeing is the most important step in the production of finer quality finished goods, and one to which Van Vlaanderen engineers have devoted much study.

The need for a machine which embodied the qualities of high speed, flexibility, perfect shrinkage control and suitability to a wide variety of fabrics has long been felt in the finishing industry.

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WINDING MACHINES —— Principles and Practices

Article 21

By JESSE W. STRIBLING
Universal Winding Co.

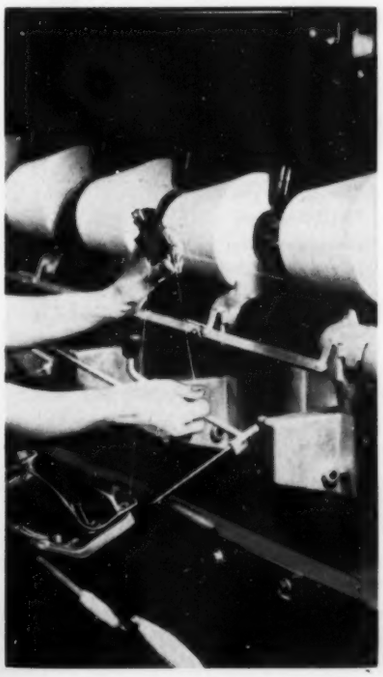
COVERED in this article on the Roto-Coner are: how to start up the machine; proper method for the operator to start the spindle; setting the breakage lever for proper balance and proximity to the tension bracket; use of pressure in building acceptable packages; and method of driving the machine by an individual motor for each side.

THE ROTO-CONER is so designed that, after having been shut down, it can be started up with a full load—that is, with the cones or tubes resting on the drums. However, this is not always good practice, and better results will be obtained if the machine is started with the cones or tubes raised.

When the switch lever on the rod (incorporated in the roll of the upper shelf) is used to stop the machine, the packages usually will be automatically lifted from the drums; sometimes, however, there is sufficient tension on the yarn to hold the breakage levers down and the packages will not rise.

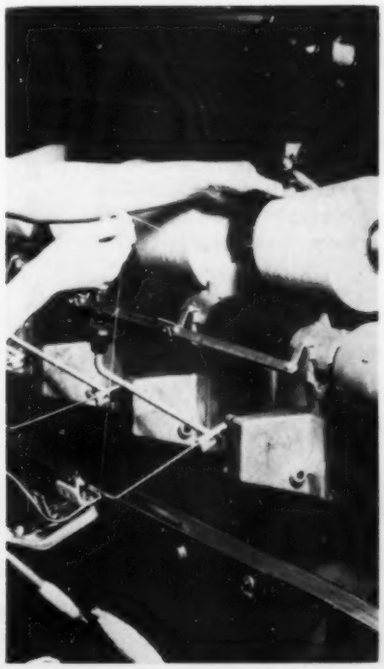
If the main switch at the head end is used to stop the machine, the breakage levers will not rise, and the packages will remain on the drum.

Fig. 125. Tying the knot.



It is recommended that all packages be raised from the drums before power is applied to the machine. This is readily done by turning the traverse shaft, by hand, about one-half revolution away from the center of the machine (toward the operator); this slackens all the ends. The pilot motor is then started, and since the ends are slack, the breakage levers will automatically rise and cause the packages to be lifted from the drums.

Fig. 126. Turning cone by hand before pressing starting handle.



Starting the Spindle. The following suggestions, based on experience in a great many mills, are offered on how to start the winding spindle:

1. The first step is to remove the empty bobbin and place it in the trough of the empty bobbin conveyor. Sometimes, several empty bobbins may be removed at the same time.

2. From the supply shelf located above the machine (or from the bobbin box underneath) the operator picks up a full bobbin and "readies" it for winding. This is done by unwrapping the coils of yarn from the outside of the bobbin at its base and winding it around the fingers of the right hand. The tail end of yarn, protruding from the inside of the bobbin at its base, is also broken off to prevent tangling with the running end when the bobbin is almost exhausted.

3. The operator places the full bobbin on the supply spindle with her left hand.

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4. At this point, the operator usually runs her finger over the face of the slubcatcher to remove any accumulation of lint.

5. Even though the tension bracket and slubcatchers are self-threading, some mills consider it safer to have the operator thread them by hand. It can be done with a flick of her right hand, and it insures that every inch of yarn will be inspected by the slubcatcher. Also, most operators find it easier to use the hand-knotter when both ends are under tension. Where the tension bracket is allowed to thread automatically, one end will not be under tension at the time of tying the knot.

6. With her right hand, the operator picks up the end from the surface of the winding package.

7. She then puts the two ends in the hand-knotter, which is on the back of her left hand, and ties the knot, inspecting it carefully to be sure it is pulled tight and that the tail ends are cut off short (see Fig. 125).

8. Holding the yarn over the index finger of her right hand to prevent kinks from going into the package, she revolves the package with the fingers of her left hand, as shown in Fig. 126, and almost with the same motion, touches the starting handle which lowers the package onto the drum. Since the package is already in motion, contact with the revolving drum will not harm the yarn. As the package picks up speed, she lowers her hand until the end is picked up by the rotary traverse. In no case should the operator be permitted to drop the end immediately after tying the knot and before starting the spindle. If this is done, there is likelihood that kinks will be formed and will be wound into the package.

Another point of caution for the operator is that she should never be permitted to stop a revolving package by using her left hand (containing the hand-knotter) as a brake. This will not only tangle the surface of the package, but the knotter may break the yarn on the package. It is strongly recommended that the operators permit the packages to stop naturally, without braking.

Winder tenders should be encouraged to develop the habit of pressing down the starting handle with the left elbow or forearm. This leaves both hands free and increases operative production, because she saves the time of bringing her left hand from the package down to the starting handle. She can quickly learn to press down the starting handle with her forearm instantly after flicking the package into rotation with her left hand.

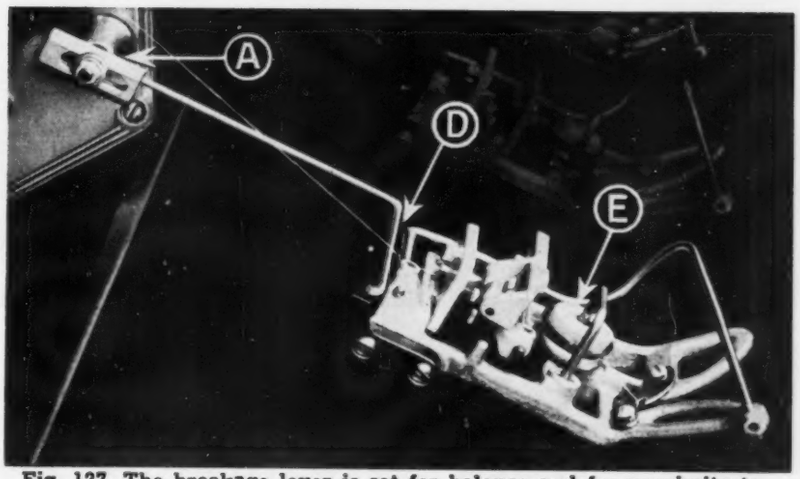


Fig. 127. The breakage lever is set for balance and for proximity to tension bracket by loosening clamps (A).

Setting the Breakage Lever. The purpose of the breakage lever is to keep the stopping mechanism out of operation while winding is taking place but to cause it to work promptly when the yarn breaks or when the supply package is exhausted. Improper setting of the breakage lever may cause slow stopping, unnecessary end breakage, and the necessity of applying extra tension on the yarn.

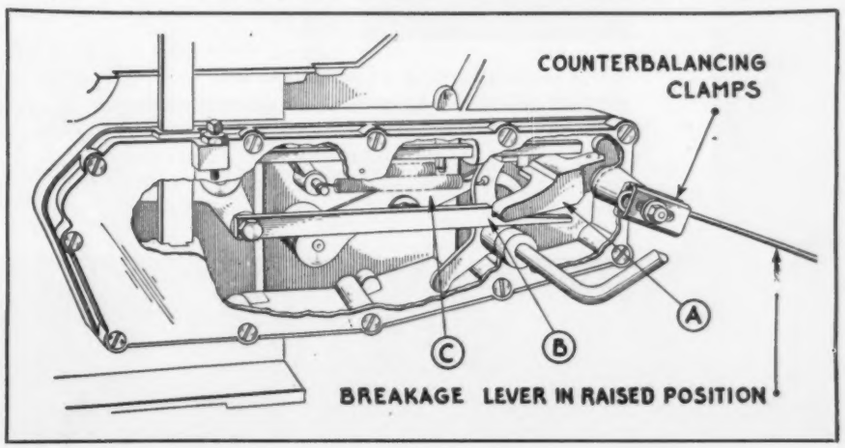
The breakage lever should be located close to the bail at the back of the tension bracket, as shown at (D) in Fig. 127. The counterbalancing clamps (A), which hold the breakage lever, have long slots so that they may be adjusted backward and forward to regulate the action of the breakage lever. They should be so located as to meet the following requirements:

1. There must be no vibration of the breakage lever while winding.

2. The breakage lever must rise promptly when the yarn breaks, or the supply is exhausted, so that the package will lift promptly and the yarn will not wrap around the drum.

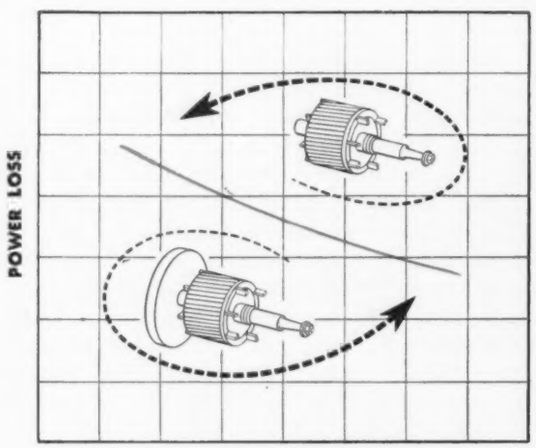
It is not good practice to add tension on the yarn in order to hold down the breakage lever. Extra tension makes hard packages, strains the yarn, and in the case of weak or fine yarn, causes un-

Fig. 128. Showing stopping motion parts, with frame cover cut away.



we've added

...to give you a motor that does more work and makes loom "feel" better!



FLYWHEEL EFFECT
This chart shows how the addition of flywheel effect in a loom motor reduces power lost through motor heating.

Today, the General Electric totally enclosed loom motor is better than ever! For, where the loom needs it, you can specify a *standard* G-E loom motor with an integrally-mounted flywheel at very little extra cost! You get these important advantages:

LESS POWER USED — By increasing the flywheel effect in the motor, power losses caused by pulsating loom loads are reduced materially.

MORE SHAFT OUTPUT — Generally speaking, a flywheel motor can be one rating smaller (or allow increased loom speed) and still do a satisfactory job.

LOWER MOTOR SPEED — You can reduce the speed of your motors from 1800 rpm to 1200 rpm and thus take advantage of the inherent merits of the lower speed motor.

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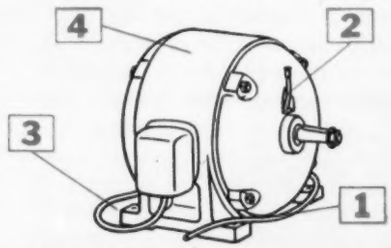
The bearings on a General Electric loom motor are bronze, backed with a bonded outer shell of steel. This means your loom motor is better able to stand up to the shocks imposed by the typical loom operating cycle. This bearing construction is better because—

FIRST, it retains a tighter fit in the end shield without taking a permanent set.

SECOND, it is better finished, making possible a more uniform oil film, and thus, greater load capacity.

THIRD, it has been designed to make the end shield, rather than the bearing sleeve, absorb punishing shaft thrust.

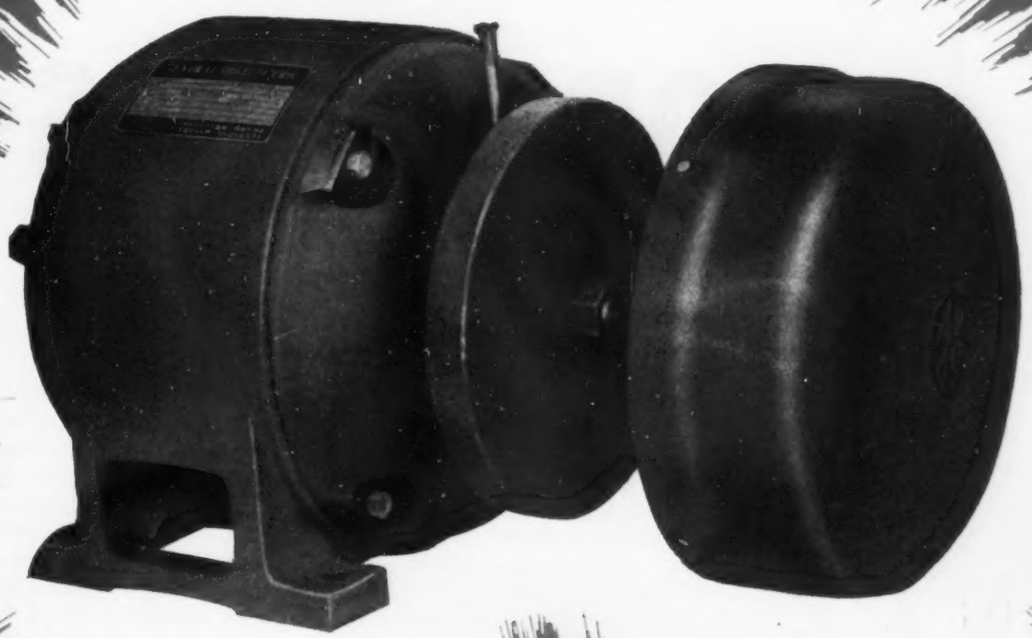
More Convenience Features!



1. G-E loom motors are furnished with a terminal box and Flamenol ® multiconductor cable containing ground wires in accordance with Associated Factory Mutual Fire Insurance Companies' recommendations. No conduit is required with this arrangement but the terminal box can accommodate conduit wiring when used.
2. Oil fittings are located on top where they are easily accessible for filling.
3. Footholes are drilled for heavy mounting bolts.
4. Handhole between feet makes mounting easy.

GENERAL ELECTRIC

a flywheel!



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ELIMINATES oxidation

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necessary end breakage. With the breakage lever properly located and adjusted, no extra tension is required to hold it down. If the space shown at (D) in Fig. 127 is too wide, the breakage lever will have a tendency to rise unless extra tension is used.

Shown in Fig. 128 are the various parts of the stopping mechanism. To set the breakage lever, first loosen the nut which holds the counterbalancing clamps; then, with the left forearm holding down the starting lever, the left hand is free to bring the breakage lever down close to, but not quite touching, the back of the tension bracket. Also, the breakage lever bail is at the same time brought close to the tension bracket bail, as shown at (D) in Fig. 127. The clamps, which act as a counterbalance, are then moved backward or forward until the breakage lever will rise promptly upon being released. The nut is then tightened, the starting handle still being held down and the breakage lever being close to, but not quite touching the back of the tension bracket.

If the breakage lever is not properly balanced so as to rise promptly when the end breaks or runs out, the end of the pawl (A in Fig. 128) will not drop quickly enough to contact the link (B). The link will then over-ride the rounded end of the pawl, and there will be unnecessary wear on one part or the other, or both, requiring possible replacement.

Wear on the pawl may also occur if the trip lever (C) should become bent or is not in proper adjustment, in which case it will not permit the pawl to drop to its full depth when an end runs out or breaks, thereby allowing the link to over-ride the rounded end.

Pressure. For normal winding, with usual amount of tension being used, the regular pressure weight (spindle holder weight) shown at the top of Fig. 129 is generally sufficient for good package formation. It is attached to the spindle holder with a screw and dowel pin as shown.

However, as has been stressed several times in these articles, pressure and tension must be considered together to produce acceptable packages. Therefore, when heavy yarns are being wound, requiring considerably more tension than usually employed, added pressure on the package will be found to improve package formation.

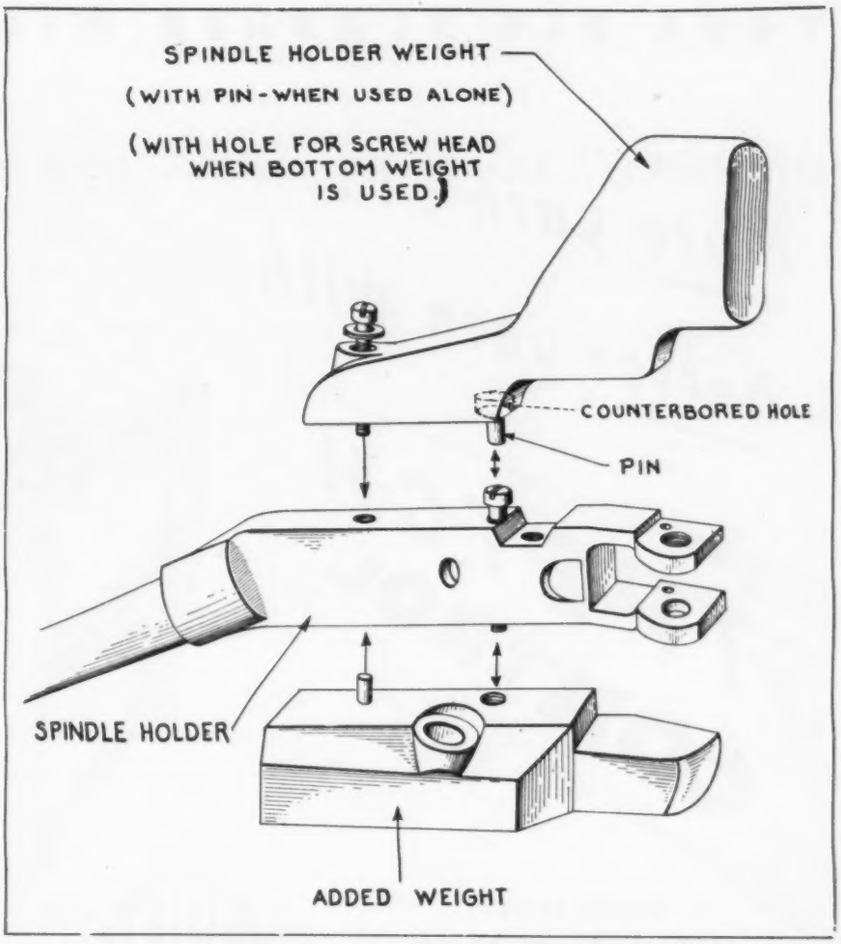
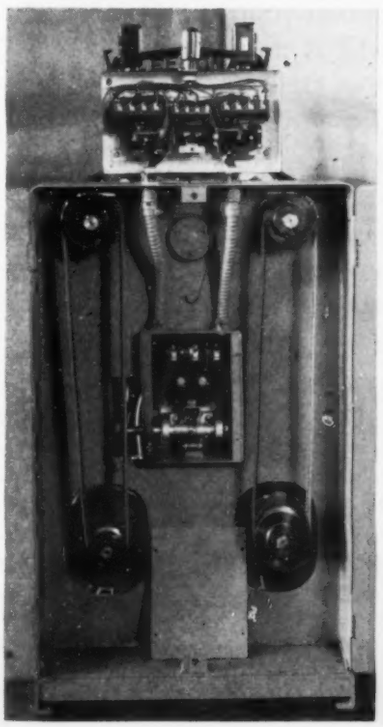


Fig. 129. Added pressure weight, shown at bottom, is used in winding coarse yarns with heavy tension.

When this is desired, an added weight is applied underneath the spindle holder as shown in Fig. 129. The pin is removed from the upper weight (by holding it in a vise and pulling the weight) and the pin hole in the weight is counterbored with a 3/8" drill deep enough to clear the head of the screw shown just below the pin, the screw passing through the spindle holder and into a tapped hole in the added weight underneath. The lower weight is fitted with a dowel pin which fits into the tapped left-hand screw hole in the spindle holder.

Fig. 130. Drive end of Roto-Coner, with individual motor for each side of machine, driving traverse shaft with V-belts.



Motor Drive. The Roto-Coner is

(*Continued on page 225*)

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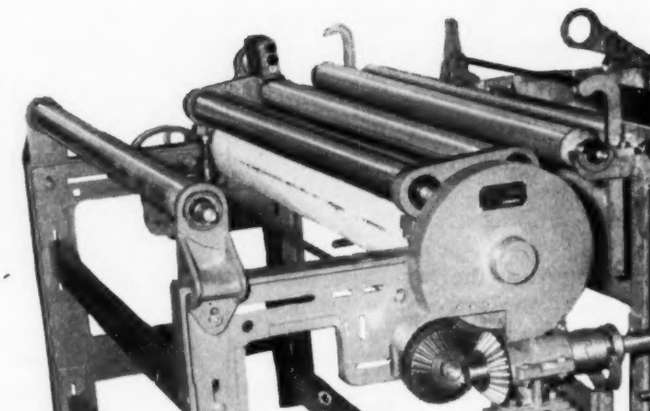

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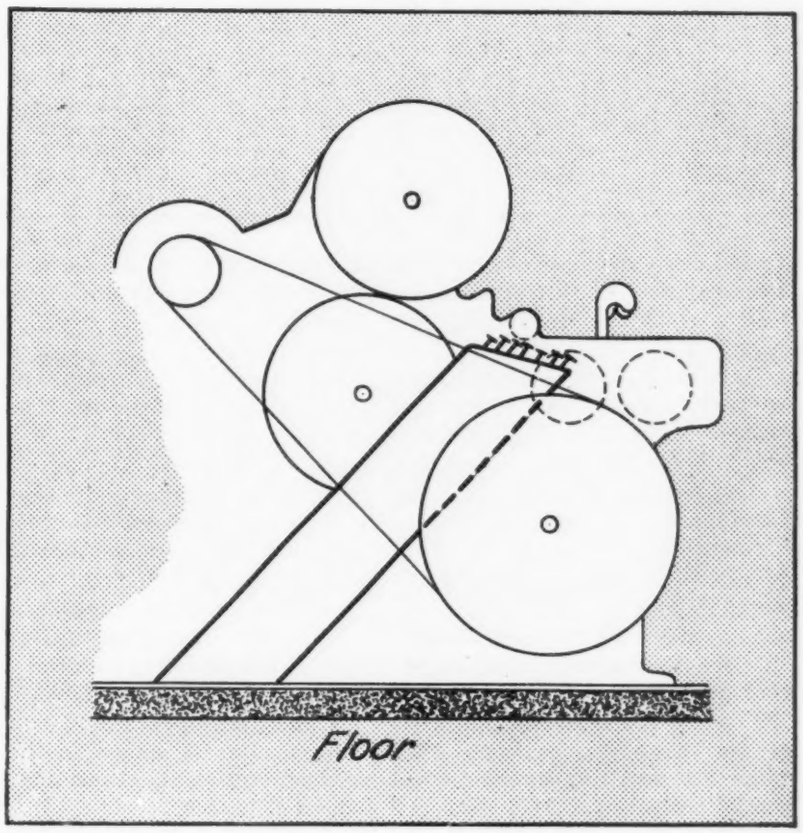
Lap Pin Storage Bin Helps Prevent Accidents

EDITOR TEXTILE INDUSTRIES:

A lap pin storage bin, similar to the one shown in the illustration, was designed to fit on the left front side of the pickers in one mill. This bin helps eliminate accidents caused by the floors being cluttered with lap pins.

The bin shown in the illustration is 4½ inches wide, 9 inches deep, 48 inches long, and it rests on the floor at an angle of approximately 45 degrees. It is held in position by straps bolted to the gear covers. The receptacle will accommodate approximately 25 lap pins or enough for about three hours of operation, depending upon the speed of the picker. The storage bin eliminates the need for carrying pins from a central storage bin for each doff.

CONTRIBUTOR NO. 8090



Question on Use of Shell Type Spinning Rolls

EDITOR TEXTILE INDUSTRIES:

We should like to see a discussion in the HOW OTHER MEN MANAGE department from mills which still use the old type shell rolls and the reasons for continuing to use them.

If the mills have any information on ends down, upkeep, and general running of the work, when comparing solid rolls versus the old shell rolls, we should find the information helpful.

Also, we are interested in experience with the new ball bearing top rolls, if mills have had these long enough to secure data.

CONTRIBUTOR NO. 8173

More on Spindle Speeds

Question Briefed: *Our frames are completely equipped with ball bearing spindles, ball bearing roller necks, and ball bearings on the cylinders. With the foregoing equipment, we are of the opinion that spindle speeds up to* 22,000 *rpm should be attainable. We are apparently limited by the danger of travelers burning off at this speed. It would be interesting to know how such problems are handled in America.* (CONTRIBUTOR NO. 7994, *India, January* 1948.)

EDITOR TEXTILE INDUSTRIES:

CONTRIBUTOR NO. 7994 has some mighty nice ring frames, equipped with ball bearings on cylinders, spindles, and rollers. Despite the modern improvements I doubt very much that he could run this frame over 12,000 rpm and still get good work for 60s.

If a frame operates at 8000 rpm and is equipped with a 5 hp motor, when raised to 22,000 rpm it would need a 14 hp motor. The increased air resistance would call for a motor of at least 27 hp, if

SPEED DATA FOR RING FRAMES

Cts.	RPM	Ring	Delivered Inches/Min.	Staple
9-16	5000	2 3/4"	420	7/8"-1"
16-20	5500	2 3/4"	390	1"-1 1/8"
16-20	6000	2 1/2"	390	1"-1 1/8"
20-26	6500	2 1/2"	375	1"-1 1/8"
26-36	7000	2 1/4"	360	1"-1 3/16"
26-36	7500	2 1/4"	360	1"-1 5/16"
36-50	8000	2	340	1"-1 3/16"
40-60	8500	2	335	1 1/8" -1 1/4"
60-80	9000	1 3/4"	300	1 1/4" -1 5/16"
80-90	9500	1 5/8"	290	1 3/8"
90-110	10000	1 1/2"	285	1 3/8" -1 7/16"
110-120	11000	1 3/8"	285	1 7/16"-1 9/16"
110-120	11500	1 5/16"	285	1 7/16"-1 9/16"
110-120	12000	1 1/4"	285	1 7/16"-1 9/16"

not more. At such speed it may be necessary to tie the frames down good — they may start to run through the wall.

There will be a powerful noise in a room with one hundred frames running at 22,000 rpm. Spindle tape will fly out, travelers will not hold, and the end breakage due to such speed would compel the foreman to use 7 to 10 times the normal help if not more. How would any spinner be able to piece up an end if some 700 or more inches were delivered per minute? A speed of 22,000 rpm is fantastic and impractical for ring frames with 1⅜" rings. The resulting traveler speed would be at least 7500 feet per minute as compared with a maximum of not more than 4100 feet per minute for this size ring.

CONTRIBUTOR No. 7994 asks how we solve such problems in America. Our country is known the world over as a practical country with fast and efficient methods, but we don't over-do our speeds because of excessive costs. Higher speeds call for more help, and help is costly here. Although an American spinner tends to some 1700 spindles running 60s, countries with low priced labor can afford four workers for this number of spindles—at higher speeds of course.

In my opinion the happy medium must be found (in each country) by considering the following: (1) Speed; (2) Labor; (3) Space; (4) Capital for machinery; (5) Power. From this we found that we are doing excellent to run our 60s (Good Egyptian Cotton) at 26 to 27 turns per inch at 8600 rpm on 2" rings, 1700 spindles per spinner.

If I had at my disposal a 1⅜" ring frame to make 60s I would, considering his low priced help, run this frame at no more than 11,000 rpm provided the empty bobbins were of sufficient diameter to permit a conventional traveler angle. It is difficult to make set rules for spindle speeds, traveler speeds, ring sizes, and counts run. Considering American conditions, if I had the facilities of an ideal set-up I would run my ring frames as shown in the accompanying table; twist multiple about 3.5 to 3.6.

It is this writer's conscientious belief that ring frames run at conservative speeds will not only run more efficiently but will require less power, labor, and turn out good quality work. The frames will also be exposed to less wear and tear.

CONTRIBUTOR No. 8006

◆

EDITOR TEXTILE INDUSTRIES:

After reading with interest the inquiry from CONTRIBUTOR No. 7994 (India) regarding spindle speeds, I think it would be better for us to ask him just what speeds he has been able to attain rather than try to give him information.

I know of no mill running 60s yarn with the equipment he has; however I do believe that 4000 feet per minute with a 15/0 traveler on a 1⅜" ring spinning 60s yarn is a very good speed.

CONTRIBUTOR No. 7994 should make extensive tests at different speeds for spindles and front roll delivery to determine his limitations. He has an ideal setup for machinery, and with long staple cotton that is available in India, I see no reason why the results should not be satisfactory, provided their preparatory machinery is as modern as their spinning.

CONTRIBUTOR No. 8153

◆

EDITOR TEXTILE INDUSTRIES:

The limiting factor for spindle speeds is the danger of travelers burning. On lower counts where the traveler has some appreciable weight and body, it is possible to attain a speed of 5000 feet per minute. Light weight travelers used on 60s would give trouble burning at this speed. It is my opinion that 4000 feet per minute is tops for CONTRIBUTOR No. 7994. This would give a spindle speed of approximately 11,400 rpm.

CONTRIBUTOR No. 8154

◆

EDITOR TEXTILE INDUSTRIES:

My experience has shown that maximum traveler speeds vary from 4500 to 5400 feet per minute. I have not had much success with any traveler speed in excess of a mile per minute. In my opinion traveler speed always controls spindle speed, and I have never heard of anyone running spindles at 22,000 rpm.

If anyone is running a spindle speed of 22,000, or a traveler speed of 6000, I would like to know the make of spindle and the traveler.

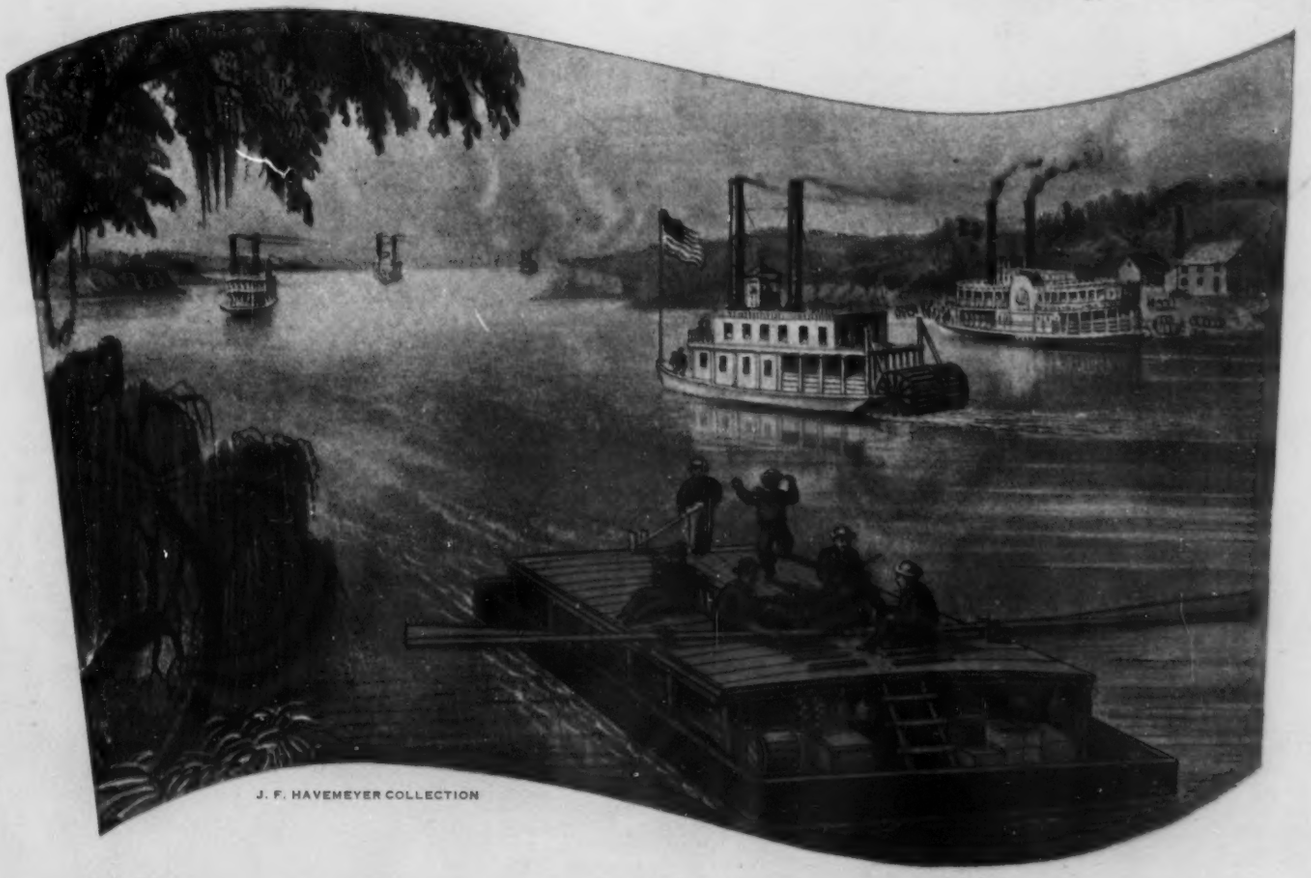
CONTRIBUTOR No. 8155

Colored Tissues Identify Beams

EDITOR TEXTILE INDUSTRIES:

Tracing back bad work on fine, lacer, and liner beams of "Leavers" machines is simplified at our lace mill. Instead of plain white paper normally used for building up beam ends to prevent sloughing-

Boatmen on the Mississippi must be alert to shoals and shifting currents to get safely to market.
THE ISELIN DIARY, 1859



J. F. HAVEMEYER COLLECTION

Take the current when it serves

We must take the current when it serves,
Or lose our ventures.
SHAKESPEARE, JULIUS CAESAR, IV, iii, 222

In 1859, currents in business, too, asked a wary eye of the man piloting a company. For over half a century, Iselin had been helping manufacturers with experienced financial and marketing counsel . . .

Today, our service enables you to take full advantage of favorable business currents—and avoid the shoals of credit losses . . .

You need not lose your venture for lack of adequate funds at the right time.

Our 140 years of financial piloting experience is at your command. Send for booklet on our Factoring service to industry.

William Iselin & Co., Inc.

357 Fourth Avenue, New York 10, N.Y.
FOUNDED IN 1808

PONSOL

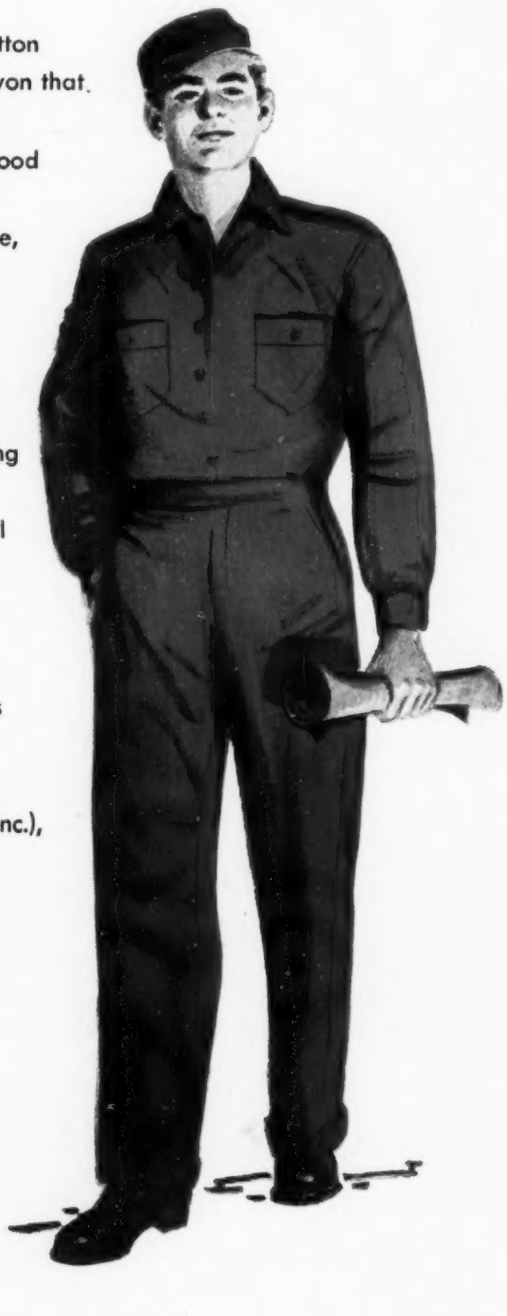
REG. U. S. PAT. OFF.

Olive T Paste

An anthraquinone vat dye for cotton and viscose-process rayon that produces neutral olive shades with excellent fastness to light. Good fastness to crocking, moist pressing, water spotting, laundering with chlorine, washing and dry cleaning.

"Ponsol" Olive T Paste reduces readily, penetrates thoroughly, levels well, has a good exhaust. It is applied by the usual vat dyeing methods. Especially recommended for military fabrics, industrial uniforms and other materials that may encounter severe treatment during wear and washing.

For additional information about this or any other Du Pont dye, write our Technical Staff. E. I. du Pont de Nemours & Co. (Inc.), Dyestuffs Div., Wilmington 98, Del.



Du Pont Dyestuffs

DU PONT

REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

off of selvage yarns, we use colored tissues.

In our plant, every beamer operator is assigned a distinctively colored paper which is wrapped concentrically with the yarn on both ends of each beam the operator turns out. Not only has this precautionary device been useful for training new help, but it also has been instrumental in reducing inferior work due to overtraversed ends, short lengths, soft beams, and mixed yarns.

The colored tissue is purchased in sheets 17 x 22 inches and cut into strips 2 x 8 or 2 x 12, depending on the size beam prepared.

CONTRIBUTOR No. 8175

The Modern Overseer

EDITOR TEXTILE INDUSTRIES:

Having been an overseer for 36 years and at times in charge of two departments in the mill, I jotted down some thoughts which may be helpful to other mill men.

Perhaps the most efficient man in the textile industry today is the overseer. Thirty years ago the story was different. The man in charge of a department was put there, in many instances, through influence regardless of his ability. The overseer was the boss, and he took advantage of every opportunity to convince the employees that he was their superior.

In those days if the overseer disliked an operative he would "fire" that person without any reason for the action. Many competent employees were discharged on account of an overseer's whim.

Jobs were scarce, help was plentiful, and it was a simple matter to keep a full staff. Those days are gone. Unions are now at full strength, and when employees assume a "leave us alone" attitude, the overseer must have the ability to influence the operatives in obtaining full production.

The modern overseer must be like Solomon in settling disputes and petty jealousies that arise daily in his department. It is very essential to be broad-minded and tolerant of every race and creed. If any distinction or favoritism is revealed, it eventually means the downfall of that overseer.

The ability to supervise women in an understanding way is a necessity. Although women are good producers on the job, allowances have to be made for physical differences and handicaps. The young men and women employed in his department give the overseer an opportunity to do constructive work. Through kindness, patience, and persuasive instruction he can mold the younger generation into men and women of fine character, with good qualities of stability in accepting responsibilities.

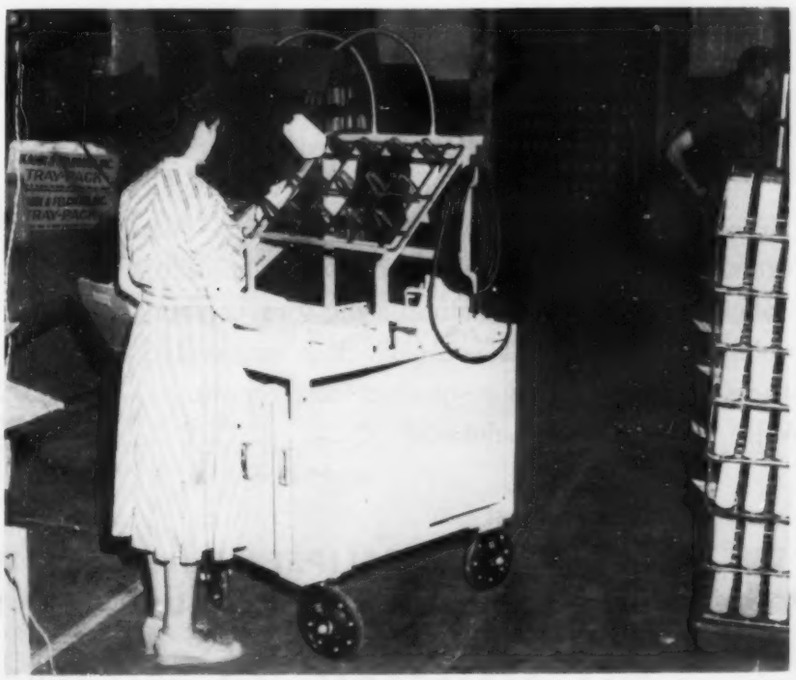
It is folly for the boss to humiliate the operatives through bullying tactics. He should acquire the spirit of humility which is foremost in stimulating the admiration, affection, and respect of the employees. Second hands and assistants should possess the same desirable qualities and consider their subordinate position.

As head of his department, an overseer must be able to convince the operatives that he knows his job and business thoroughly in every way. He must be democratic, affable, and sociable. He should bury tendencies toward injustice and bring forth the kindly characteristics which promote good will and harmony on the job.

CONTRIBUTOR No. 8172

PORTABLE PACKAGING TABLE FOR THROWSTERS

Cones ready for shipment are individually inspected, wrapped, and packaged in Tray-Packs on portable stands at Kahn and Feldman, Inc., throwsters. The stands are wheeled directly up to waiting cone racks adjacent to winders. Engineered by Kahn and Feldman machinists, each rubber castered stand is equipped with a flexible fluorescent lighting fixture, extension cord, inclined inspection rack, flat work table, packaging panel, supply item trays, and pull-out bins in which various yarn wastes are separated. The contrivance aids production.



STALEY PRECISION-MADE STARCHES INSURE THESE THREE BENEFITS ...

1. *Uniform* SIZING
2. *Better* WEAVABILITY
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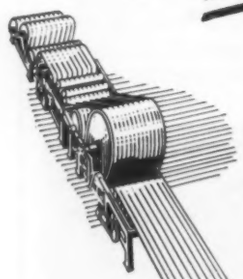

Why not let Staley's highly skilled laboratory technicians recommend without extra cost to you, correct starches for ALL your sizing requirements? Staley's complete line of modified and unmodified Corn Starches—guarded for uniformity by rigid scientific controls—is acclaimed by leading textile manufacturers for consistent high quality and dependability. Let Staley work with you in eliminating forever your sizing problems, just as this company has cooperated with others for more than a quarter of a century. Write Today for more details!

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DALLAS, TEX.
CHICAGO, ILL.
DECATUR, ILL.

Staley's CORN AND SOY BEAN PRODUCTS

STALEY "ECLIPSE" MILL* AND PEARL STARCHES

*THIN BOILING

A. E. STALEY MFG. CO., DECATUR, ILL., U.S.A.

Thin Places in Knitting Yarn

Question Briefed: *We would appreciate advice from your readers on how to avoid thin places in the type of yarn we are manufacturing. We make knitting yarns and would like to make 20s to 50s, but we have not been able to make a yarn finer than 20s that will stand up in quality.* (CONTRIBUTOR No. 7906, *August*, 1947).

EDITOR TEXTILE INDUSTRIES:

CONTRIBUTOR No. 7906 is using excessively short cotton for his type of work. He should be using 1 1/16-inch staple. All steel rollers from drawing to spinning should be checked for loose necks. Machine speeds seem to be satisfactory for the type of work being run.

Regardless of the length of cotton staple, it would be practically impossible to make good yarn with the slubber drafts used by CONTRIBUTOR No. 7906. I suggest changing the slubber to .60 hk. roving with a draft of four and twist multiplier 1.10. The intermediate roving should be 1.2. hk. with a draft of 4.02, using 1.20 twist multiplier.

The speeders should run 3.32 hk. with a draft of 5.48 and 1.35 twist multiplier. I recommend this twist multiplier to care for bad roving sticks and vibration of the machine. It may be helpful to check for correct lay on the bobbins because incorrect lay is bad for uneven roving. Tension should be regulated properly on fly frames.

Undoubtedly the closest possible roll setting should be used on drawing rolls, depending upon whether they are metallic or common.

CONTRIBUTOR No. 8167

How to Estimate the Length of Coiled Material

EDITOR TEXTILE INDUSTRIES:

The article entitled "How to Estimate the Length of a Coil of Card Clothing" on page 221 of the November issue reminded me of a method often used for estimating the length of a coil of any material, especially belting. The method can be used for estimating the length of a coil whether wound tightly or loosely.

The procedure is to measure the average diameter of the coil by taking the measurement from the outside of the roll to the far side of the core. This measurement is equal to the average diameter of the whole coil. The radius is also equal to the average diameter of the circle (see illustration).

The average diameter of a loosely wound coil is equal to half the sum of the greater and smaller diameters when measured from the far side of the core to the outside of the coil in both instances.

Formula:

$$\frac{\text{Av. Dia. in Inches} \times 3.1416 \times \text{No. laps}}{12} = \text{Length in feet}$$

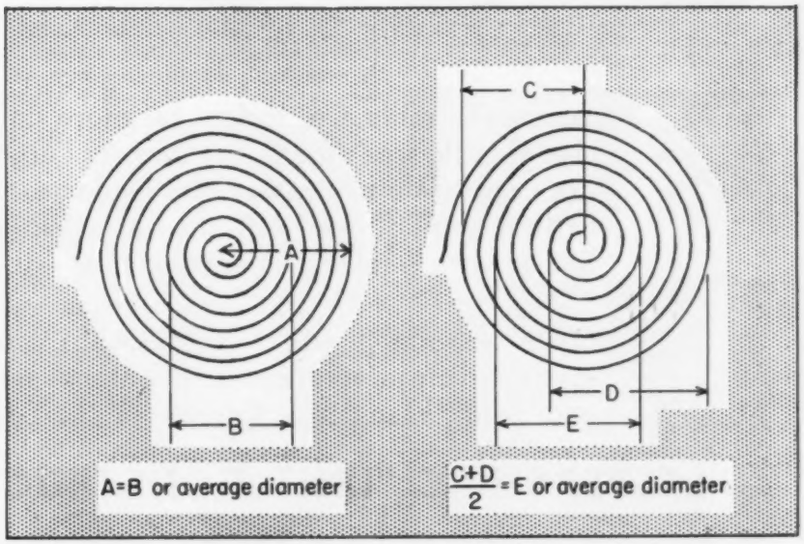
Example: A coil of medium double belting has twenty-five laps. The core is six inches and the measurement from the far side of the core to the outside of the roll is thirteen inches. The length of belting in such a roll would be as follows:

$$\frac{13 \times 3.1416 \times 25}{12} = 85 \text{ feet}$$

Applying this method to the coil of card clothing, assuming the core to be one inch, and average diameter to be 10⅜ inches, the length would be:

$$\frac{10.375 \times 3.1416 \times 25 \text{ laps}}{12} = 68 \text{ feet}$$

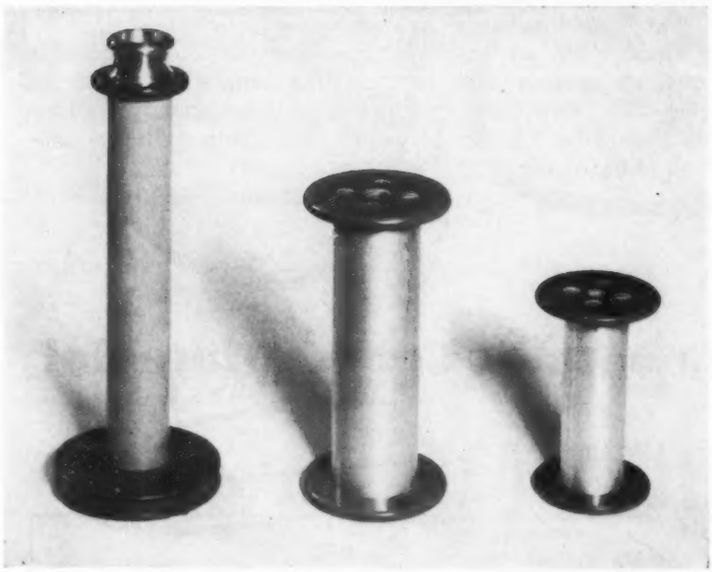
This method is not quite as simple as the one submitted by CONTRIBUTOR No. 8114, but the results seem to be more accurate. CONTRIBUTOR No. 8114 is correct in that the length of a coil varies with the area; although my for-



"The average diameter of a loosely wound coil is equal to half the sum of the greater and smaller diameters when measured from the far side of the core to the outside of the coil in both instances."

Eliminate Spindle Wear With

LESTERSHIRE
"UNIT CONSTRUCTION"



BOBBINS

—made from stable materials to the very closest balance and concentricity tolerances.

Successful mills are, today, far more conscious of excessive spindle wear than ever before. Large appropriations are constantly being made to replace worn spindles. Yet little is gained, even with the best of spindles, if the bobbin or yarn package is eccentric or unbalanced.

Only bobbins made from STABLE materials can be made to close tolerances in balance and concentricity *and hold those close tolerances their full lifetime.*

LESTERSHIRE "UNIT CONSTRUCTION" BOBBINS

are made from stable materials, to the very closest balance and concentricity tolerances.

A demonstration is convincing.

LESTERSHIRE SPOOL & MFG. CO.
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GREENVILLE TEXTILE SUPPLY CO., Greenville, S. C.

mula should be preferred from the standpoint of accuracy.

CONTRIBUTOR No. 8146

Question on Dyeing Wool

EDITOR TEXTILE INDUSTRIES:

We are having difficulty obtaining level dyeing on wool when using Algosol dyes. We should like to have the opinion of other mill men regarding the kind of acid and the amount to use in dyeing wool with leucoesters of vat dyes, without affecting the levelness of dyeing.

CONTRIBUTOR No. 8179

$100 for Best Kink or Short Cut

(Ends July 15, 1949)

ONE HUNDRED dollars will be awarded the contributor who furnishes the most helpful short cut, kink, time-saving device, cost-cutting suggestion, or quality improvement idea by July 15. The contest may be entered by any reader of this magazine, but the kink must not have been published elsewhere.

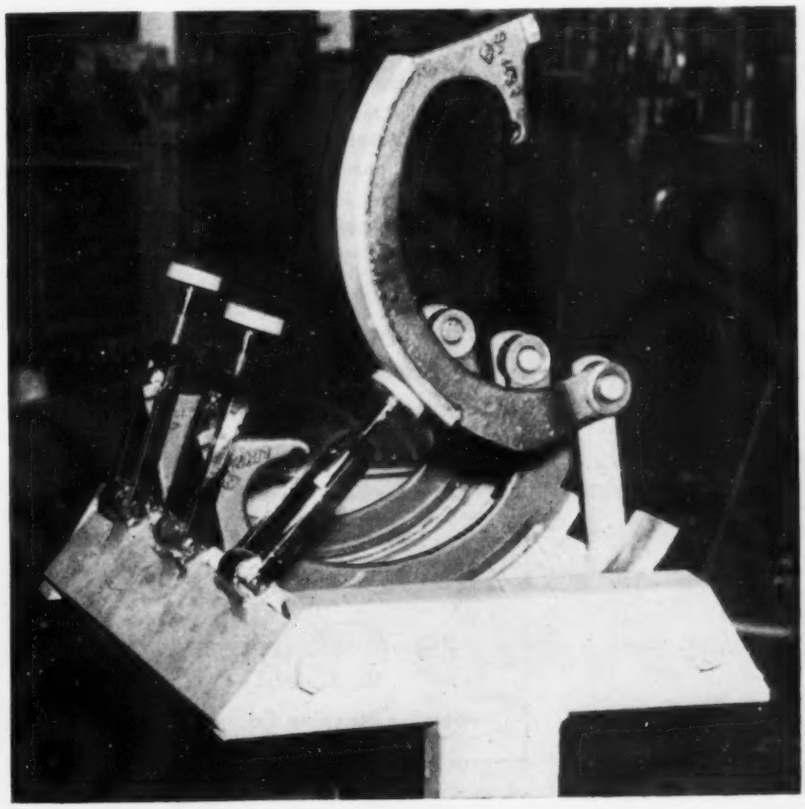
In sending in ideas, give complete description and where possible accompany description by sketch. Finished drawings are unnecessary. Participants are not restricted as to number of kinks submitted for consideration.

Only one award will be made, but non-winning contributions will be paid for at regular rates if used. Advise in original correspondence if participant's name may be used, or if contributor number is preferred.

All entries must be postmarked not later than midnight of July 15, 1949. Address: Editor "Textile Industries," 806 Peachtree Street, N. E., Atlanta 5, Georgia.

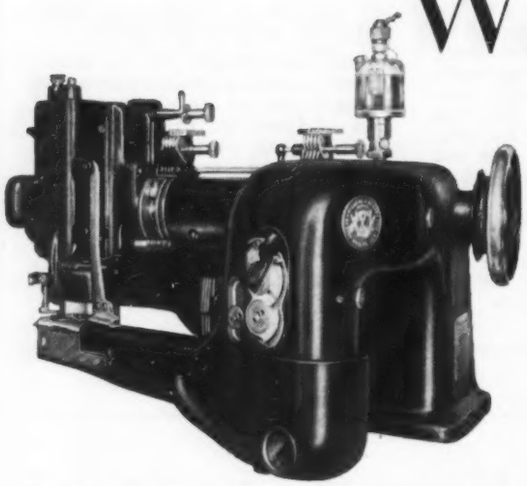
Handy Jig Aids in Relining Loom Brake Shoes

Shown here is a device that has been used successfully in glueing the lining to brake shoes on Draper XD looms. The lining is held in place against the shoe evenly until the glue becomes dry. This prevents air pockets from forming under the lining and insures uniform adhesion. The brake shoe in the foreground is purposely held up to show how it is attached. The remainder of the shoes are in place. Contributor No. 8097.



This view of the relining device shows the stand and supporting members. The framework is simple and rigid to allow moving the jig from one location to another.

Three ways to look at the W & G "Flatlock"*



The W & G "Flatlock" is designed to permit the operator to work in a natural and relaxed position at all times.

The Work Arm is widely separated from the base, providing greater clearance for handling the work.

The single, solid base principle provides for easier installation on Sectional Power Tabling, or the newly designed Individual Motor Table.

1. AS A BOOSTER OF SALES

Knit underwear seamed on the "Flatlock" is the first choice of buyers throughout the world. For the "Flatlock" seam is perfectly flat — free from uncomfortable ridges or humps. It is the only stitch which makes a perfect union of *abutted* edges, greatly enhancing the appearance of garments and contributing immeasurably to the comfort of the wearer.

2. AS A MEANS OF INCREASING PRODUCTION

The "Flatlock" incorporates many improvements which permit sustained high-speed production with minimum operator effort and fatigue. Among these features are: greatly increased work space at the forward end of the frame; smooth, vibrationless operation; semi-automatic lubrication which cuts oiling time in half; self-setting needles, and easy threading of needles and loopers.

3. AS A PRECISION MACHINE FOR CUTTING COSTS

Every detail of the "Flatlock" is precision designed and manufactured to permit *easier* maintenance — and *less of it*. Readily removable covers provide easy access for cleaning and adjustment. A newly designed Arm Cap facilitates removal of broken needles or excessive lint and filler — and is self-opening in case an excessive amount of foreign substance should accumulate.

FOR COMPLETE INFORMATION send for your copy of our 8-page illustrated bulletin, No. 902.

**Reg. U.S. Pat. Off.*

WILLCOX & GIBBS
Sewing Machine Co.

214 West 39th St., New York 18, N.Y.

Hoover's Modern Concord Plant

Staff Prepared

EXCLUSIVE

Features smooth flow of materials, high level lighting, new production equipment, and modern facilities for convenience of employees.

HOOVER Hosiery Company, manufacturers of "Townwear" full-fashioned hosiery, was among the first to introduce 51-gauge knitting to the South. In keeping with the modern trend, production of a complete line of full-fashioned nylon hosiery is now under way in an entirely new building with an equipment layout for efficient operation. The mill is designated Plant No. 2, and is designed for a smooth flow of materials from the receiving room, through the production and inspection departments, to storage and shipping.

The exterior of the building is of red brick with concrete trim. The architecture is modern, and the windowless design gives an impression of cleanliness and efficiency. Inside, all permanent walls are of glazed tile throughout the production area. The concrete floors are covered with walkways of maple flooring between the knitting machines which are spaced approximately three and one half feet apart.

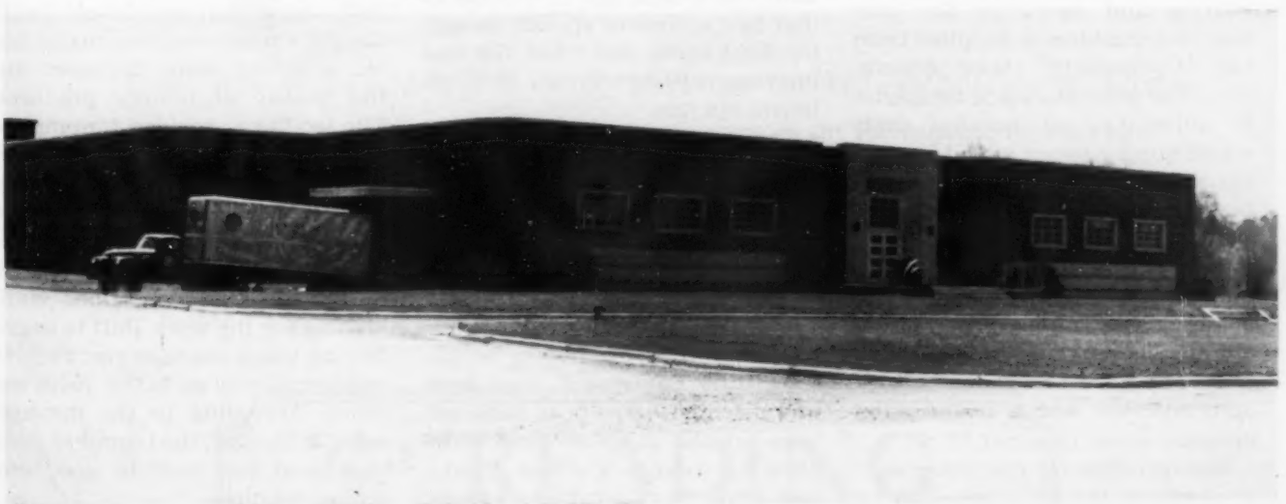
Although the knitting machines rest on the concrete floor, the operatives walk on the maple flooring in the aisles, thereby preventing excessive fatigue from standing on the cold, hard concrete floor. Drip pans underneath the knitting machines aid good housekeeping by catching splashed oil or lubricants that may drip from the machines.

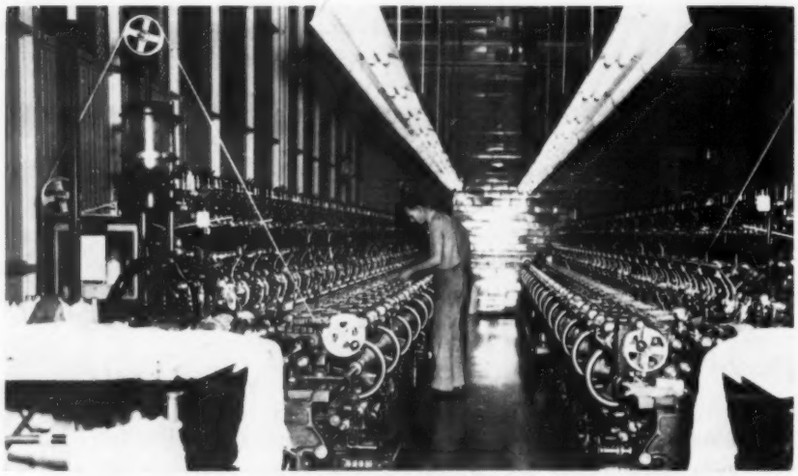
The structure was designed to permit future enlargement without major alterations on the existing building. A wood partition serves to enclose the rear of the plant, and future additions may be made easily by removing the wood and extending the brick structure. The walls and roof are well insulated.

Air Conditioning. The entire plant is air conditioned, and there is positive temperature and humidity control in all departments except preboarding and shipping. The preboarding department is ventilated by circulating outside air through inlet and exhaust ducts equipped with fans. Outside air brought into this area is automatically heated in cold weather but is not cooled in summer.

In all other departments, conditioned air is distributed through overhead ductwork connected to a plenum chamber in which a mixture of outside air and recirculated air is washed in a spray of water. The water spray is cooled in

Exterior view of Hoover Hosiery Company's modern plant at Concord, N. C.





Above, these two new "Reading" knitting machines are set directly on the concrete floor, but maple flooring in the aisles reduces operative fatigue from standing on the rigid concrete surface. Below, new equipment in the seaming department and good planning for rapid flow of materials have increased the output per seamer. Note modern lighting in both departments.

summer and heated in winter.

Steam Generators. Steam for heating and operating the preboarding machines is supplied from two "Cyclotherm" steam generators. The generators are completely automatic, oil burning units which supply steam at full operating pressure from start within a matter of minutes. At the present time, one steam generator can furnish steam for the entire plant, so they are operated alternately week by week. To start a generator, a button is pressed to fire a spark plug. The generator then operates automatically, and a boiler room operator is not required.

Refrigeration for the water used to condition the air is provided by a four-cylinder, double unit compressor built by Carrier Corporation. The compressor is flexible in that two cylinders operate to supply light loads, and when the load increases sufficiently, all four cylinders operate.

The temperature of the water spray is controlled by an automatic system designed and manufactured by Powers Regulating Co. A Foxboro temperature and humidity recorder, located in the knitting room, records the variation in temperature and humidity.

Knitting Equipment. New knitting machines have been installed. Some of the machines were supplied by Textile Machine Works, and some by Karl Lieberknecht, but all of them are equipped with electronic variable speed controls made by Reliance Electric Co. The plant is designed for a total of 40 knitting machines, and new machines are being installed in accordance with delivery from the factories.

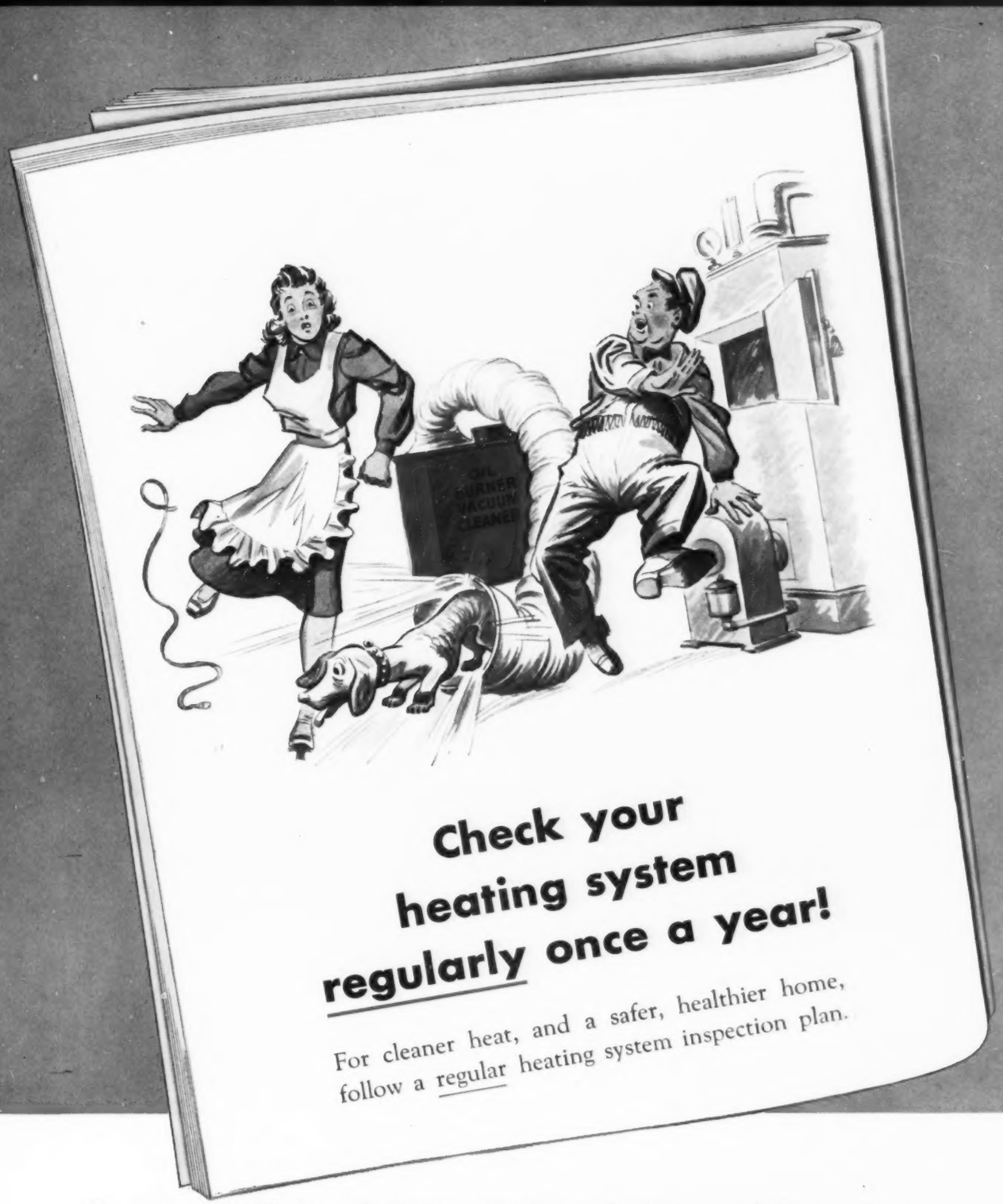
New machines have been installed in the preboarding department, looping and seaming, and new tables are in use in the inspection and mending area. Most of the new machinery is in constant operation on a two shift basis.

Flow of Materials. Movement of materials through the new plant is almost in a straight line. The receiving department is on the left side of the building near the front, and the storage and shipping rooms are on the right side near the rear of the building. Between the receiving and shipping departments, hosiery in various stages of production, flows in a straight line, with a minimum of time lost in reversing the direction of travel.

Lighting. In planning the building layout, the need for good lighting was not overlooked. In the knitting room, fluorescent fixtures are placed end to end in rows directly above the knitting machines. The resultant light intensity is approximately 75 foot-candles at working level. Good lighting standards have been maintained in other departments, including looping, seaming, and inspection operations.

Employee Facilities. A. R. Hoover, Jr., general manager, and O. R. Suther, superintendent of the mill, stated that convenient facilities for employees are a major factor affecting labor turnover and the quality of hosiery produced. The facilities provided for employees in this plant include a modern first aid room, large tile rest rooms, stall showers, and metal lockers.

A lounge near the front of the building is furnished for employees to rest or read magazines while waiting for the work shift to begin. During lunch hours or rest periods, employees may go to this room and relax. According to the management at Hoover, the room has more than paid for itself in good employee relations.



Check your heating system regularly once a year!

For cleaner heat, and a safer, healthier home, follow a regular heating system inspection plan.

Have your Full-Fashioned Knitting Machines checked—regularly—to keep them at highest efficiency . . . Follow a regular program for reneedling and your needle bars are always in shape for better knitting . . . Follow a regular program for reconditioning and your plant is always at peak performance. We will be glad to discuss this matter of regularity as it applies to your mill operation.

TEXTILE MACHINE WORKS • READING, PA.

The "READING"
Full-Fashioned Knitting Machine

Where Flexibility Counts

When a pole vaulter soars gracefully into the air, he depends on the flexibility of the pole for the final kick that carries him over the bar.

It is this kind of flexibility that is built into Textile Spring-Beard Needles. Textile controls—automatic and electronic—operate at every step in the production sequence to achieve exactly the right tempering of the needles. You can see the difference in smooth, even knitting.

TEXTILE MACHINE WORKS, READING, PENNA.

Textile

SPRING-BEARD NEEDLES

For Full Fashioned and Warp Knitting

Highlights of Activities During

Knitting Week in Atlantic City

Knitting Show successful; Maynard elected NAHM board chairman; manufacturers urged to modernize equipment and methods.

Staff Report

ATLANTIC City during the last week in April was the scene for many activities of those connected with the knitting industries. At this time was held the 39th Knitting Arts Exhibition which was of interest to all branches of the knitting industry, the 45th annual meeting of the National Association of Hosiery Manufacturers, the 12th Hosiery Industry Conference, and numerous informal gatherings of friends who look forward to this occasion for social meetings and business discussions.

Reid A. Maynard of Tower Hosiery Mills, Inc., was elected chairman of the board of the National Association of Hosiery Manufacturers, succeeding Alexander Scott, Jr., of Scott Brothers Hosiery Mills.

The knitting show proved to be successful, despite the dampening effect of the current market. New products exhibited at the show for the first time have either been described in recent issues of this magazine, or the descriptions appear in this issue. No effort is made in this issue to repeat editorial information which already has been published.

Constantine's Report. The hosiery industry has returned to a normal competitive market. As normal competition increases, those operations within the industry which are fit will survive, while the others will find increasing difficulties and some will have to suspend operations.

A reduced capacity resting on the most efficient equipment is far to be preferred to a larger capacity which depends in part on relatively obsolete equipment whose unit costs are too high.

Modernization in equipment and method, and efficiency in all aspects of management, are the price of survival in the days ahead.

Merchandising. For a period of seven years the problem of the hosiery industry was to secure materials and to allocate products. Under such conditions the art of merchandising suffered. Merchandising must now be developed to the highest degree possible. This involves improvements in constructions, good styling, and close cooperation with the distributors.

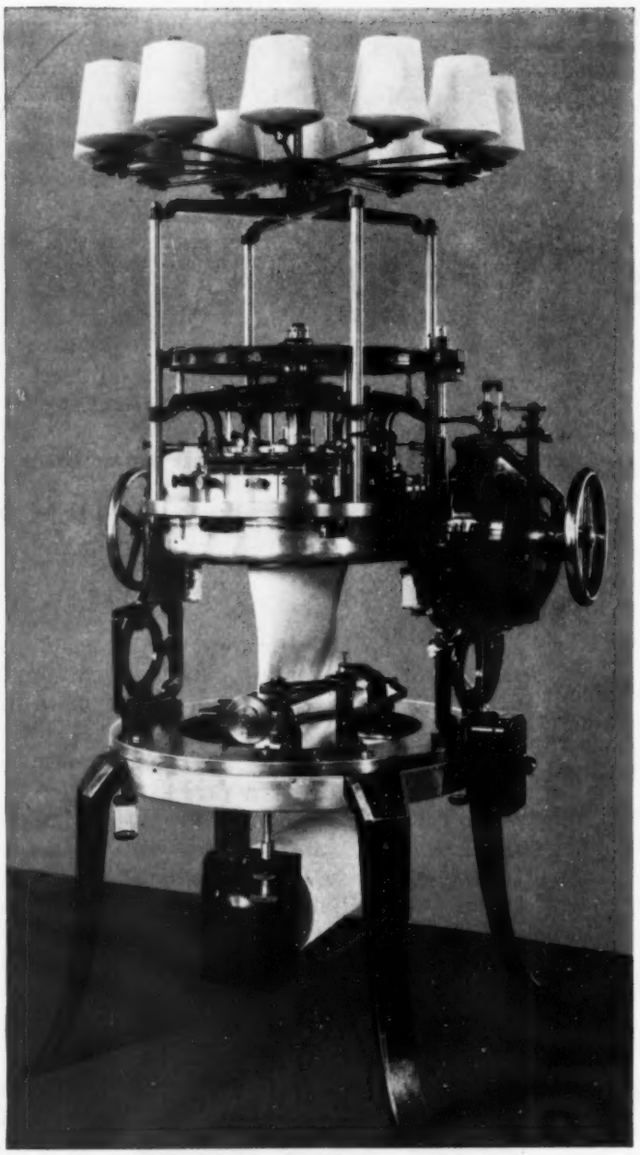
Reid A. Maynard

Prices. The price structure of men's hosiery has suffered and is today unsatisfactory. The present condition cannot continue indefinitely. The costs of production remain high and distributors will find it advantageous to return to normal quantity-buying of supplies.

The performance of many retailers in using a quality product, such as nylon hosiery, as a loss leader and kicking it around the market like a football, is strongly to be deplored. If it is sold at a loss, it is bound to suffer in quality.

Exports and Imports. Measuring our exports of hosiery during 1948 against those of 1947, we find a decrease of 26.2 per cent in units sold. The total hosiery imports for 1948 were very slightly over that of 1947 and consisted principally of wool hosiery supplied in major part by Great Britain. We cannot expect to indefinitely export if we do not also import.

The National Association of Hosiery Manufacturers accepted the recommendations of its nominating committee, electing the following to its board of directors: (Three year terms) Ray F. Borda of Rosedale Knitting Co., Carl V. Cline of J. A. Cline & Son, Andrew J. Doyle of Contour Hosiery Mills, Edwyn W. McMillin of Richmond Hosiery Mills, and Reid A. Maynard of Tower Hosiery Mills, Inc.; (two year term) J. Frank McCrary of McCrary Hosiery Mills, Inc.; (one year term) Hugh L. Merritt of Renfro Hosiery Mills Co.



All eyes are on this New

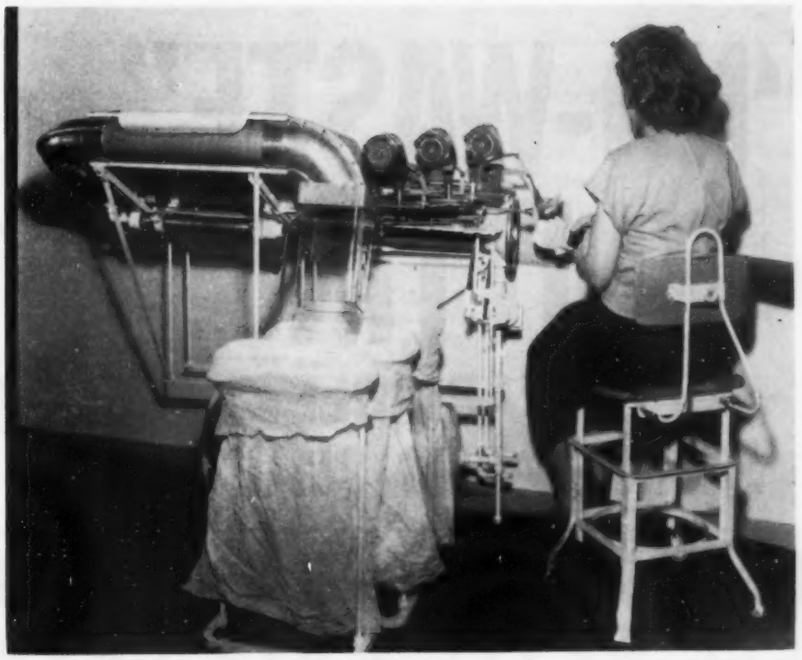
WILDMAN Knitting Machine!

Here's a machine that can be made to meet your most intricate or your simplest operation. So flexible, our engineers can easily adapt it to any knitting demand of your mill.

Its product is consistently and beautifully perfect . . . offering exceptional style range and remarkable accuracy in garment sizes. Its construction embraces many exclusive features and operational advantages—among them the ability to tie cone to cone without stopping the machine. Lots of other features.

Wildman Mfg. Co., Norristown, Pa.

Above, counting and sorting machine receives stocking from the form.



Right, full view of counting and assorting machine. Note Plexiglas chute and three containers. Operative is placing stocking on inspection form to gauge it according to length.

Machine Separates Hose by Length

(On display at 39th Knitting Arts Exhibition)

A NEW machine, which is used in conjunction with the expanding inspection form, receives the stockings from the form, draws them into the machine by suction, and by pedal control from the inspector drops them into one of three containers according to length of the stocking, counting the number during the operation.

Preliminary tests in a large hosiery mill indicate that production is increased.

As shown in the accompanying illustrations, the hosiery inspecting form is located adjacent to the counting and assorting machine. The operative draws the hose on the form, gauges it according to length, slides the stocking toward the end of the form, where it is drawn into the tube on the counting machine. As soon as the inspector has determined the length of the stocking, she presses a pedal to direct the Plexiglas chute on the counting and separating machine to the proper container. The hose is dropped into the container.

Counting the stockings as it drops them into containers, the machine rings a bell when the proper number of hose are in the specially constructed bags.

Edward R. Ammon, Inc., 616 N. 8th St., Reading, Pa.

For additional data, request item F-204, using card on page 220.

ATTACHMENT PROVIDES VERSATILITY OF HEEL AND SOLE DESIGN

(On display at 39th Knitting Arts Exhibition)

The Wildman single head full-fashioned hosiery machine has been improved with a new Pointex attachment which is claimed to have a much greater range than the old attachment.

With the latest attachment it is possible to go all the way from a pointed high spliced heel to a meeting of the sole reinforcements at the start of the toe.

The Pointex is operated by high and low buttons on the pattern chain. A high button moves the carrier in one direction, a low button moves it in the opposite direction, so that simply by rearranging the buttons on the chain any design of high spliced heels and reinforced soles (in two needle steps) can be made.

Wildman Mfg. Co., Norristown, Pa.

For additional data, request item F-217, using business reply card on page 220.

Now... Supreme Exclusive!

"NO-WASTE" KNITTING

OF VARIABLE STRIPES AND PLAIDS

NEW SYNCHRONIZED CUTTERS* ELIMINATE ALL WASTE WHEN CHANGING COLORS

Model SA-ROF. Modern in design, proven in use, backed by experience.

This revolutionary Supreme development gives chest stripes, blazers and plaids a sales appeal that was never before possible. It saves yarn, dollars and time. It means clean-as-a-whistle fabrics that are easier to finish because the cloth does not have to be reversed. Easier to sell too; the buyer gets all cloth for his money . . . there's no braid of waste added into the cloth poundage.

An exclusive Supreme feature, the new waste-eliminating cutters are available on the Model SA Automatic Variable Striper and the Model SA-ROF Variable Stripe and Plaid Knitter.

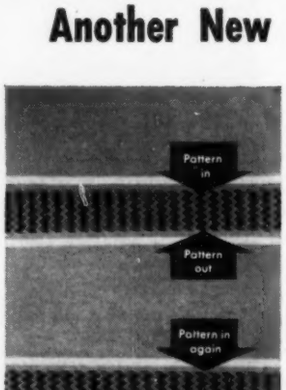
Here's how it works...

Each striping feed is equipped with one of these simple cutters. At the correct instant, the yarn that is going out of action is clipped off close to the narrow seam. It is then held in a unique clamping device along with the other yarns, each ready to go back into action the moment the pattern calls for it. No waste yarns, no floating yarns, no special and intricate stop motions.

*Patent Pending

SK-120

Another New Development



THE AUTOMATIC PATTERN PLACER

Available on the Model SA-ROF, this new device lets you place a pattern wherever you want in plain or striped jersey cloth. You can engage or disengage the pattern at will, separating the pattern with plain or variable striped fabric. The result? Practically any combination of patterned and plain or striped jersey.

Write today for the free booklet "Variable Stripes and Plaids Pay" and free cloth samples that show other unique features and wide knitting ability of the Models SA and SA-ROF.

SUPREME

KNITTING MACHINE CO., INC.

107 JOHNSON AVE BROOKLYN 6, NEW YORK N Y

Hosiery Trade Baffled By Present Mix-up

The hosiery business, as presently described by a leading authority, seems to be "shocked and sick." Predictions made during the last season (and early in 1948) that nylon stockings would be in short supply this spring unless buyers resumed their normal purchasing, have failed to materialize. The hosiery field still remains overproduced. In some quarters, therefore, the tendency is to look around for somebody to blame it on.

One observer says the knitting mills ought to agree on a two-shift, five-d a y s-p e r-w e e k production schedule. Other critics cite what they described as a mistaken policy among yarn sources, which is said to have resulted in feeding undesirable deniers into the mills and withholding wanted types of nylon yarn that would have encouraged manufacturers to go into different constructions from the standpoint of appearance and snag-resistance.

In the stocking business, the foregoing is strictly in line with traditional developments, but it now seems that a good many in this industry have forgotten their history. Two years back, hosiery producers and their outlets—and the unionized hosiery workers—rode "high, wide and handsome" as to wages and prices, and the public had the funds and was in the mood to pay the bills. The makers and sellers of women's apparel and accessories then counted on a sellers' market at least through 1950, once again overlooking the old adage that "time and tide wait for no man." The tide of consumer purchasing power and willingness to spend freely began to ebb last summer, but the manufacturers' and merchants' recognition of this trend lacked timeliness. As a consequence, stocking wearers are now at the head of the procession of retail price declines, and the store-keepers and manufacturers so far have lagged behind.

What now is most often counseled among manufacturers is "honest and sincere cooperation," to get wages down and reduce factory output, and otherwise put market control back into the hands of those who patently "muffed their main chance" in 1948 and earlier.

Knitters Likely to Get Future Yarns Lower

In the first four months of 1949, buyers strengthened their control over yarn prices. This applies not only to cotton yarn, but also to those spun from the other natural fibers and from synthetics. This follows the general trend, yarn interests concede.

During last quarter it was thought knitting yarn rates had reached a common denominator. However, demand up to mid-April remained too small to take up all the yarns of various kinds that

IMPROVED TRICOT KNITTER BY WHITIN

(On display at 39th Knitting Arts Exhibition)

A high speed improved tricot knitting machine, designated Model C-2, features electrical controls, improved lubrication, and increased productive capacity. A higher quality knitted fabric can be manufactured on the Model C-2, according to the manufacturer.

Among the developments which this newest model offers are accommodations for various sizes of warp spools including the 21-inch diameter spool, elimination of pattern wheel levers and placement of wheels at end of guide bars, and a heavy rigidly stressed frame which is said to reduce vibration to a minimum.

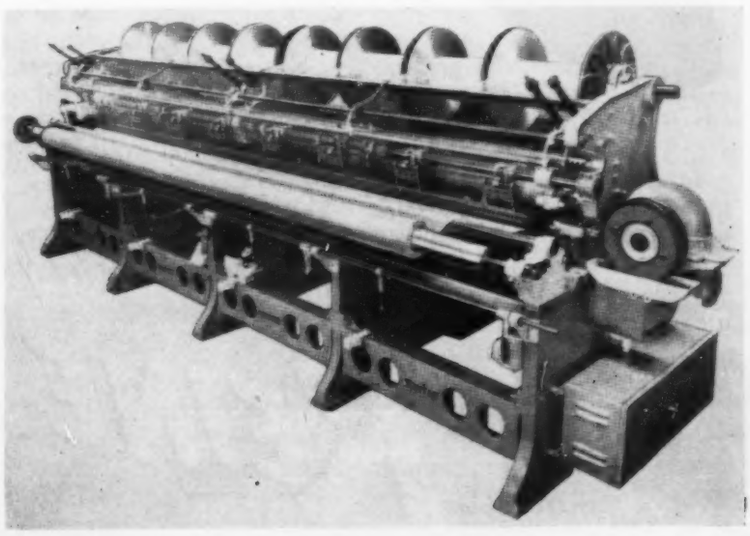
An automatic pump periodically supplies oil through metering valves to all bearings by a Bijur lubricating system.

The knitting cycle may be advanced in small increments or run slowly by means of an electrical inching device and its control bar which eliminates hand wheels from the front of the machine.

A new electrical stop motion reduces the stop streak to almost invisibility, it is claimed. A center-mounted tachometer and predetermined rack counter are located in the same space as the oil pressure gauge and three-shift rack counter.

Whitin Machine Works, Whitinsville, Mass.

For additional data, request item F-215, using business reply card on page 220.



4 Section *Reiner*

60 GAUGE FULL FASHIONED

TWIN KNITTER

By actual mill tests an excellent producer of finest quality stockings. It is built along the lines of a standard full-fashioned hosiery machine. It stresses simplicity and sturdiness. It comes fully assembled and can be operated by unskilled help. Additional features are: High-speed knitting and fashioning. Semi-automatic welt turner. Fully automatic friction control. Individual motor drive. Up to eight yarn carriers. Knitting width 15".

It fashions a round heel stocking (or square heel stocking in conjunction with the Reiner Auto Heeler). Many other features.

Write for richly illustrated catalog or visit our showrooms for a demonstration.

FOUNDED IN 1903

ROBERT REINER INC.

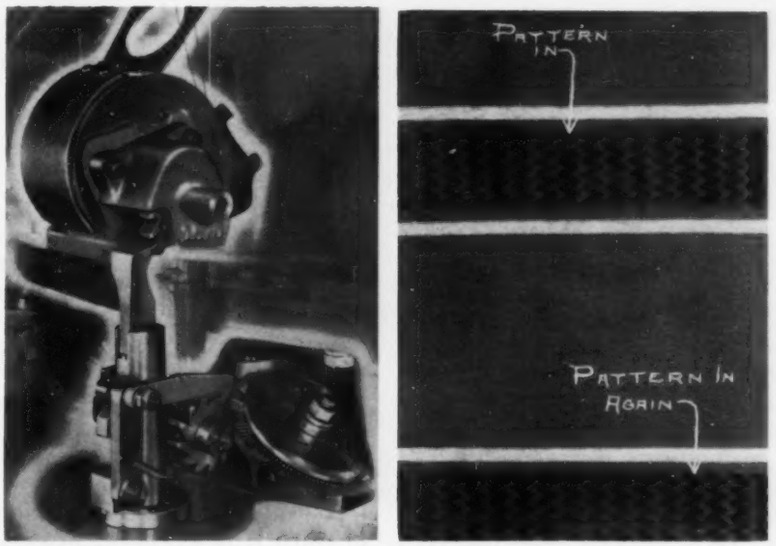
550-564 GREGORY AVENUE
WEEHAWKEN, NEW JERSEY

10 MINUTES FROM TIMES SQUARE. Take Bus Nos. 61, 67, 167 from the Times Square Public Service Terminal at 260 West 42nd Street, New York City. Get off at Pleasant Avenue, Weehawken, New Jersey. From there turn left and walk through the underpass up to Gregory Avenue . . . TELEPHONE: UNION 7-0502, 0503, 0504, and 0505. From New York City call LONGACRE 4-2217.

were offered. This can be partly attributed to excessive output during the winter months by yarn sources that have great faith in their products. Mainly, however, it seems to be due to underconsumption because of the relatively slack demand for finished goods among wholesale and retail outlets.

It is to be recognized, yarn people admit, that the merchandising outlets in the textile-garment field have had plenty of problems to solve. With regard to movement of yarns, it can be said that in general the knitting trades have shown conservatism in new buying and a commanding concern in getting their yarn costs down. In part, it is conceded, this is warranted. A good many types of knitting yarn still seem overpriced from the buyers' standpoint. It is to be expected that before June 1 this condition will be largely effaced.

The volume angle now seems to be distinct from prices for yarn for the knitting trades, because additional price concessions thus far have failed to spur volume buying. A good many cotton yarn outfits, it is explained, are more ready now to reduce prices than to lessen their production. They regard their manufacturing set-up as suitable for their present and future needs, and they want mostly to retain their competent



AUTOMATIC PATTERN PLACER

(On display at 39th Knitting Arts Exhibition)

Available on Supreme Model SA-ROF variable stripe and plaid knitters, this device enables the placing of a pattern wherever it is desired in a plain or striped jersey cloth. The pattern placer is synchronized in its action with that of the rotary striping drum that changes colors. The pattern can be engaged or disengaged at will, separating the pattern with plain or variable striped fabric. Practically any combination of patterned and plain or striped jersey is the result.

Supreme Knitting Machine Co., 105 Johnson Ave., Brooklyn, N. Y.

For additional data, request item F-210, using business reply card on page 220.

SIMPLIFIED OPERATION IN PREBOARDING EQUIPMENT

(On display at 39th Knitting Arts Exhibition)

Improvements recently incorporated in the design of P&S preboarding equipment are reported to have simplified its operation.

On machines designed and built previous to the improvement, all of the boards are thrown out at once after the chamber has risen. With a new "dual-board take-out device," the boards are brought out individually and continuously at the two boarding positions on the machine. It is claimed that this arrangement cuts wear and maintenance to a minimum.

The operation of this latest preboarding equipment is based upon cam action. After the steamchamber rises to the top of its stroke, the boards are automatically raised to a vertical position by a lift ring rotating over the cam.

The boards then rotate until two of the boards on each side of the machine have been brought out to the boarding and stripping position by a dual automatic take-out device. The machine remains in this position until the operators are ready to strip and board stockings on the two forms on each side, which are already in the boarding position. At the same time, one of the operators pushes a button to restart the turntable.

After the turntable has been restarted, the forms come out into the two boarding and stripping positions continuously, until all of the stockings are stripped and fresh stockings are boarded on the forms.

Proctor & Schwartz, Inc., 7th St. and Tabor Rd., Philadelphia 20, Pa.

For additional data, request item F-218, using business reply card on page 220.

ROTARY HOSIERY DYEING MACHINE

(On display at 39th Knitting Arts Exhibition)

A heavy gauge stainless steel rotary dyeing machine for hosiery features contoured ends which are said to impart strength, insure quieter operation, and give more even distribution of dye liquor. The use of a graduated dye distributor permits additions without the hazard of "flashing" or uneven dyeing, it is claimed.

The machine contains stainless steel roller bearings. There is no corrosion problem in sprockets or gears which come into contact with dye liquors since these parts are made of acid-resisting stainless steel.

Burlington Engineering Co., Inc., Graham, N. C.

For additional data, request item F-216, using business reply card on page 220.

help. It remains for knitting interests to find an approach toward lower yarn costs, while aiding spinners to sustain an efficient production organization.

Non-Run Multiple Feed Knitting Machine

(On display at the 39th Knitting Arts Exhibition.)

The new B-17 latch needle knitting machine makes non-run fabric. It is multiple-feed, the 20-feed machine taking the 10-in. diameter. The machine is equipped with stop motion and has electric drive that is said to be foolproof.

Although the equipment will handle any type of yarn, it was manufactured especially for synthetic yarns to be used in ladies' underwear. No steam or oil conditioning of the yarn is necessary, according to the manufacturers.

Tompkins Bros. Company, Syracuse, N. Y.

For additional data, request item F-205, using business reply card on page 220.

Machine Preboards and Boards in One Operation

(On display at 39th Knitting Arts Exhibition.)

The November 1948 issue of this magazine (page 177) described Turbo's new equipment for finish-boarding of all types of hosiery.

This machine has been improved by the addition of equipment which is said to permit preboarding and finish boarding in a single operation. Also, the new equipment may be applied to the company's existing equipment so that this procedure may be followed. Basically, this is the same machine as previously described, with the addition of a vacuum system.

The hose are placed on the forms which pass into the drying chamber. In the chamber the hose are subjected to steam pressure for 45 seconds at a temperature of 150 degrees. The steam then is cut off and the new equipment produces a vacuum within the drying chamber; this continues for one minute. The room temperature valve automatically starts for five seconds, and within a few additional seconds the hose are ready to be removed from the forms.

All the foregoing operations are performed after the hose are dyed.

Turbo Machine Co., Lansdale, Pa.

For additional data, request item F-206, using business reply card page 220.

TWIN DISC COMPENSATOR FOR EXTREME YARN SPEEDS

(On display at 39th Knitting Arts Exhibition)

A new twin disc compensator has been developed for use on high speed automatic winding machinery. This device permits high speed winding at constant tension regardless of speed, back drag, or yarn friction. It is designed around the principle of compensating a pre-set maximum tension by the variables inherent in yarn handling at high speed.

By distributing the tensioning force between the two sets of spring loaded compensating discs, yarn can be handled at extreme speeds and breakages due to knots or rapid tension surges eliminated.

Walter Kidde & Co., Inc., Belleville 9, N. J.

For additional data, request item F-211, using business reply card on page 220.

Single Conveyor Hosiery Pre-Dryer

A new single conveyor pre-dryer for hosiery is claimed to provide a speedy, controlled, and certain method for pre-drying heavy socks prior to boarding.

When this machine is used, wet socks coming from the dyehouse are loaded onto a two-foot-wide conveyor and carried through a drying enclosure. In the enclosure, it is possible to control temperature and air circulation to dry socks to a predetermined moisture content.

With stockings of different weights and styles being dried down to a desired moisture content before boarding, properly pre-dried hose can be pulled on the forms completely and the toes

LOOPER LIGHT INCREASES PRODUCTION

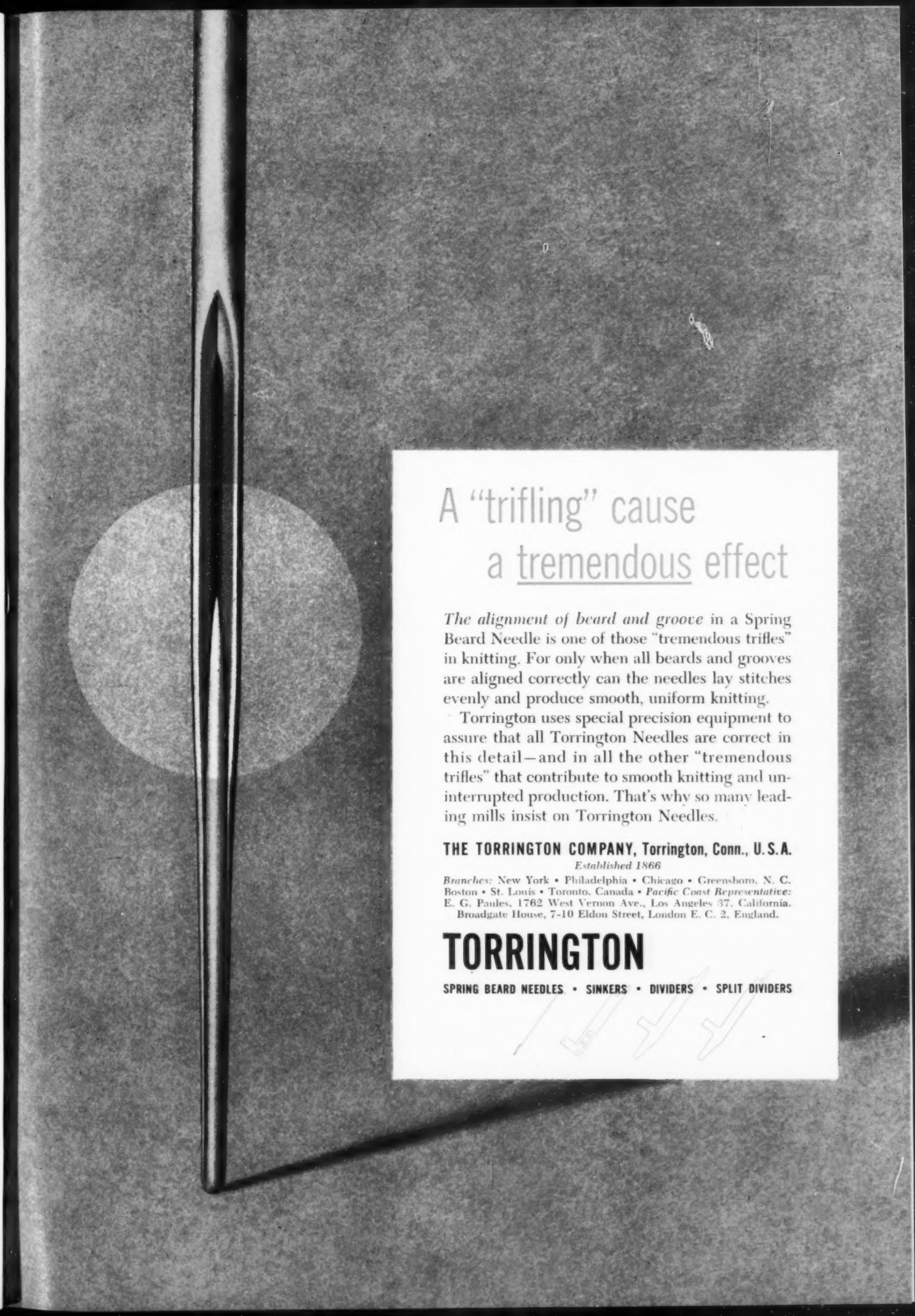
(On display at 39th Knitting Arts Exhibition)

Specially designed to bring concentrated light at the needle point of the looper, the new Looper Light spots 300 foot candles of light at the dial.

According to the manufacturer, the light lessens eye strain, gives no-glare vision, and generates little heat, thereby assisting in increasing production.

Textile Trimming & Boarding Machine Co., Front and Green Sts., Reading, Pa.

For additional data, request item F-208, using business reply card on page 220.



A "trifling" cause a tremendous effect

The alignment of beard and groove in a Spring Beard Needle is one of those "tremendous trifles" in knitting. For only when all beards and grooves are aligned correctly can the needles lay stitches evenly and produce smooth, uniform knitting.

Torrington uses special precision equipment to assure that all Torrington Needles are correct in this detail—and in all the other "tremendous trifles" that contribute to smooth knitting and uninterrupted production. That's why so many leading mills insist on Torrington Needles.

THE TORRINGTON COMPANY, Torrington, Conn., U.S.A.

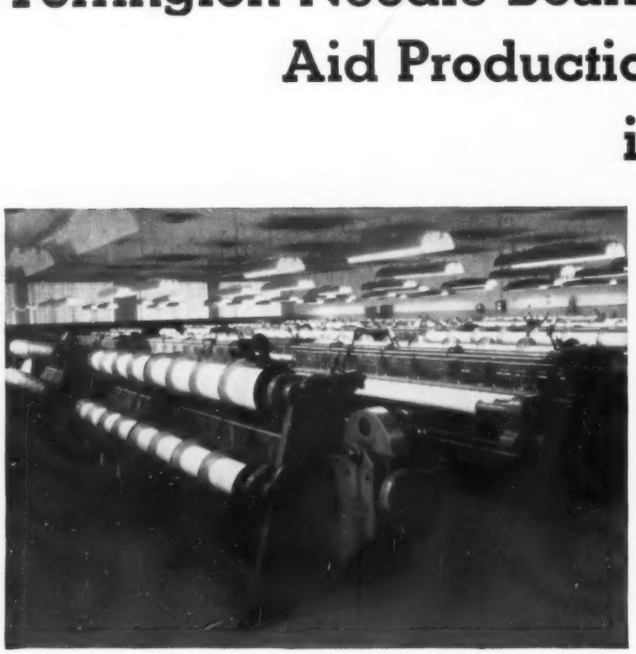
Established 1866

Branches: New York • Philadelphia • Chicago • Greensboro, N. C. Boston • St. Louis • Toronto, Canada • *Pacific Coast Representative:* E. G. Paules, 1762 West Vernon Ave., Los Angeles 37, California. Broadgate House, 7-10 Eldon Street, London E. C. 2, England.

TORRINGTON

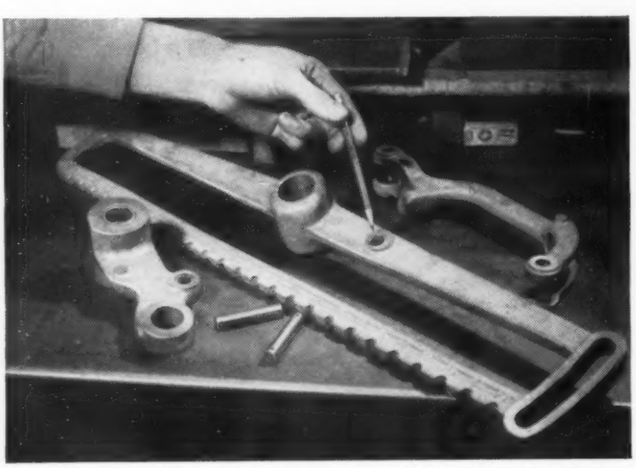
SPRING BEARD NEEDLES • SINKERS • DIVIDERS • SPLIT DIVIDERS

Torrington Needle Bearings Aid Production of Quality Fabrics in Reiner Tricot Machines

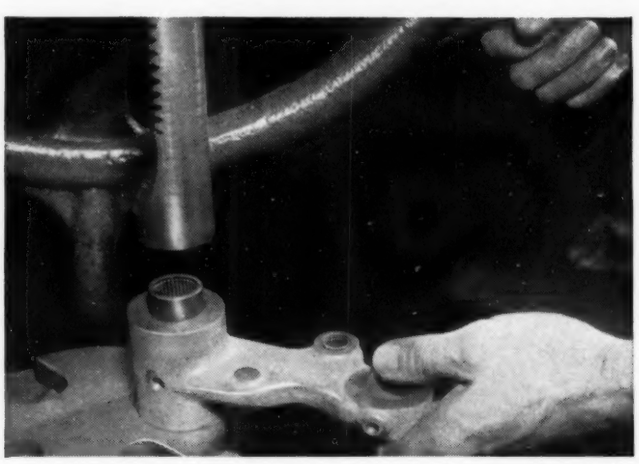


High fabric quality, steady production and economical maintenance are outstanding features of high speed Tricot Knitting Machines built by Robert Reiner, Inc. In the balanced floating controls, 8 Needle Bearings contribute to uniformity of knitting.

The balanced floating control design, with accurate response provided by the Needle Bearings, assures that the cloth will knit uniformly over the entire knitting length. Smooth operation results from the low friction coefficient of these high-capacity bearings.



The use of Torrington Needle Bearings helps keep the design simple, requiring only the elements shown here. An accurately machined bore serves as housing, and a hardened and ground shaft as the inner race. No spacers or retainers are needed.



Installation of Needle Bearings is an easy, quick operation. Each bearing is installed with one stroke of the arbor press, taking a firm press fit. These features mean economy in design, fabrication and assembly, providing anti-friction efficiency at low cost.

Knitting action of the Reiner Tricots is further aided by the use of 32 Torrington Needle Bearing Cam Followers, 2 NCS Needle Bearings supporting the lower beam ends, and 9 Spherical Roller Bearings on the cam shaft. Let our engineers help you apply Torrington Bearings to improve the performance and service life of your textile equipment. Write us today. THE TORRINGTON COMPANY, Torrington, Conn., or South Bend 21, Ind. District offices and distributors in principal cities.

TORRINGTON *NEEDLE* **BEARINGS**

Needle • Spherical Roller • Tapered Roller

Straight Roller • Ball • Needle Rollers

and heels flattened out. Cushion sole, wool, or ribbed socks can be boarded and stripped more efficiently according to the manufacturers. A saving in floor space, labor, and time is said to result from the elimination of spreading or hanging to accomplish the partial drying.

The new conveyor has a capacity of 300 dozen pairs of socks per hour, depending upon weight of the sock and the speed and temperature at which the machine is operated.

Proctor & Schwartz, Inc., 7th St. and Tabor Rd., Philadelphia 20, Pa.

For additional data, request item F-219, using business reply card on page 220.

Underwear Sales May Soon Show a Spurt

Producers and distributors of heavyweight underwear contend that according to their calculations an upturn in buying among wholesale and retail outlets will not be delayed much longer. It is recognized that some outlets still own fairly substantial weights of knitted undergarments that were left over from the past season, however, spokesmen assert that this cannot be regarded as a universal position. A certain percentage of customers always, at this time of the year, can be counted on to cover ahead with staple items for next fall and winter.

So far, it is reported, producers of heavyweight woolen merchandise in this field have experienced favorable results from salesmen now on the road. It is to be considered that this kind of garment would be likely to command a better market, compared with cotton underwear, as manufacturers' costs and prices for the latter are likely to fluctuate.

It is conceded, however, that so far the buying for future needs has been conservative, but manufacturers' agents and the wholesale houses say they are not pessimistic. Initial orders received in various eastern centers, plus the fill-ins, eventually will total-up to a volume at least comparable with that taken during the like period last year, it is claimed.

Among underwear items reported as moving well are striped polo and "T"-shirts, especially the vat dyed kinds. Nylon sweaters in solid shades have sold to retail for around $3.95 and also some attention is being given boucle sweaters.

It is cited by some authorities in this field that the majority of knitters of underwear and outerwear seem now to have little more to fear as regards further increases in labor costs, and thus should be in position to discount in advance the probable decline in cost of yarns and many other manufacturing materials and supplies.

New Singer Overedging Machines

(On display at 39th Knitting Arts Exhibition)

Production of the Class 246 Overedging Machine, in five varieties, each with special equipment to facilitate the handling of certain types of overedge operations, has been announced. The flexibility of this machine is such that these five varieties encompass practically all operations in the overedging field, including those requiring trimming.

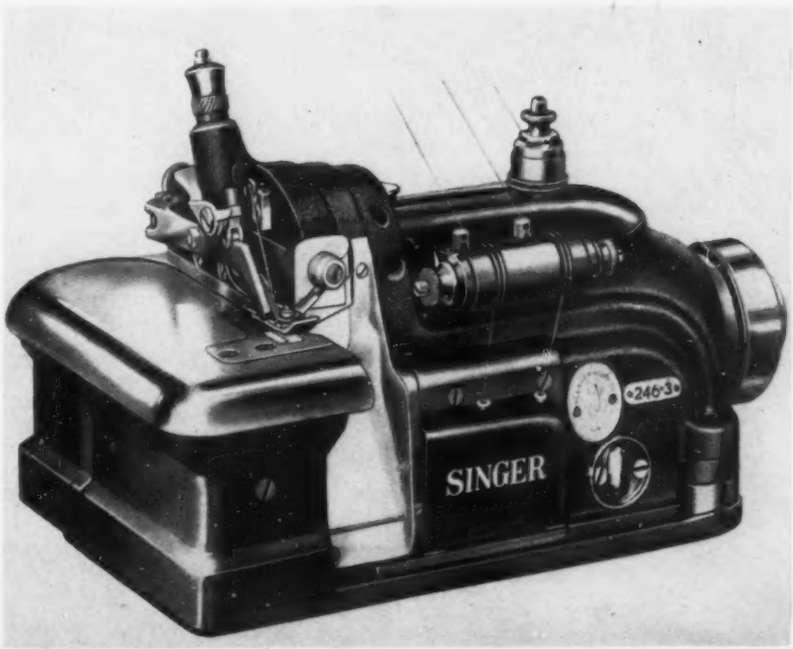
Increasing the machine's versatility is a newly developed differential feed which allows the efficient stitching of a full line of knit goods. Appropriate changes in fittings permit stitching with two or three threads. Also, in some varieties the machine is supplied with a trimmer mechanism. These new features add greatly to the machine's flexibility and scope of use, it is claimed.

The 246-1 machine is primarily a pants serger without trimmer but is also well adapted for selvage edge closing on sweaters, sewing cord on slide fastener tape, fruit and vegetable bags and similar operations.

The 246-2 machine is equipped with a trimmer for pants serging, dress shields, pillow cases, etc.

The 246-3 machine has a differential feed, which permits gathering, stretching or uniform feeding

The new Class 246 overedging machine (Singer).



UNION SPECIAL*

the Lockstitch

UNION SPECIAL MACHINE COMPANY
407 N. Franklin St., Chicago 10, Ill.

*®

Now is the time when the advanced performance of the Union Special Lockstitch can pay you EXTRA DIVIDENDS. In addition to improving the quality of work produced, this machine, through its high speed, fast starting and stopping, and ease of operation, consistently delivers greater output per hour of work at a lower unit cost per piece handled. Put the Lockstitch to work in your own plant! Let it help get greater output with less expense. The Lockstitch is available for a wide variety of single needle, plain seaming operations. Get the machines you need NOW! See your local Union Special representative, or write.

INDUSTRIAL SEWING MACHINES

of material, and has an adjustable trimmer for margins of 1/16" to 1/4". This machine has a very wide range of usefulness, from light and stretchy materials such as sweaters, bathing suits, polo shirts and tee shirts to auto seat covers.

The 246-4 machine is furnished with a differential feed for blind hemming on slips, shirts, underwear and similar articles of knit goods.

The 246-5 machine is similar to the 246-3 machine with a higher presser foot lift for heavy work.

The internal mechanism of the machine is well balanced and virtually noiseless. An automatic oiling system provides complete lubrication for all parts. Quality stitching is maintained by a positive stitch setting.

Singer Sewing Machine Co., 149 *Broadway, New York* 6, *N. Y.*

For additional data, request item F-202, using business reply card on page 220.

Revision of Commercial Standard CS46-40 For Hosiery Lengths and Sizes

A recommended revision of hosiery lengths and sizes, Commercial Standard CS46-40, has been approved for promulgation, according to announcement by the Commodity Standards Division of the National Bureau of Standards. This standard, which was first issued in 1933 and revised in 1936 and 1940, will be effective from June 22, 1949. It will be identified as CS46-49 (Fourth Edition).

This revision was proposed by the National Association of Hosiery Manufacturers and approved by the Standing Committee in order to include standard measurements for men's athletic socks, men's crew socks, and men's and boys' slack socks. It provides standard methods of measuring, and lists standard sizes and lengths, with length tolerances for men's, women's, and children's hosiery, thus providing a uniform basis for guaranteeing full length

(plant installation, JEFFERSON MILLS, Pulaski, Va.)

● It's a brand new, precision machine designed to eliminate the present-day headaches of the nylon throwster—produces perfectly built tapered packages (8-oz. to 12-oz.) at new, higher spindle speeds than conventional twisters! Wire, phone or write for complete information!

MODERN THROWING EQUIPMENT FOR PROFITABLE PRODUCTION
● Cuts Operating Costs ● Boosts Production & Quality ● Reduces Maintenance

WRITE FOR ILLUSTRATED BULLETIN!

U.S. TEXTILE MACHINE CO.
700 Gilligan St.—Scranton 8, Pa., U.S.A.

Your knitting will be smoother, faster, more profitable with

LAUREL

finishes

Laurel knitting finishes increase your production and improve the appearance of your knit goods. Laurel finishes are developed to meet the specific dyeing, bleaching and finishing requirements of all fibers and combinations. Laurel Technicians will cooperate with you, as they do with hundreds of leading knitters, in developing the right finishing formula for efficient and profitable processing. Write for recommendations.

Textile Soaps, Oils, Finishes

PARTIAL LIST OF LAUREL KNITTING FINISHES

Hydrocop & 3B Softener • Hydrosol • Nylon Finishes • Hosiery Finishes • Synthetic Detergents — Diotrene T — Superterge L — Supergel RS • Stainless Knitting Machine Oil.

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INCREASED PRODUCTION
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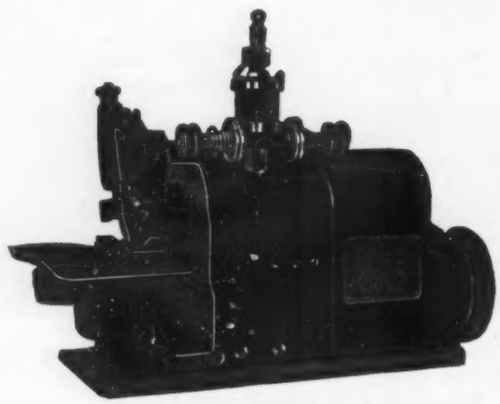
FOR USE ON

Knitted and Woven Wear of All Kinds



QUALITY RESULTS
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For Best Results Use a Machine Suitably Arranged for Your Work

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Knitting and Warp Yarns

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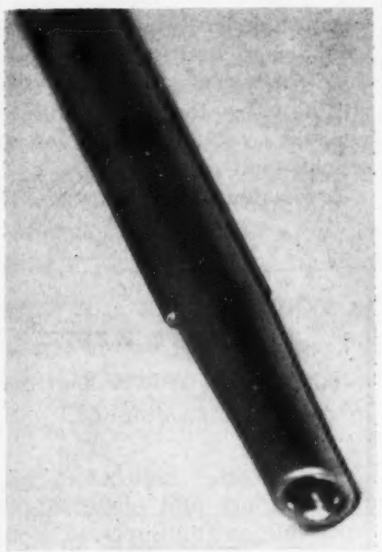

NEW CARRIER TUBE

(On display at 39th Knitting Arts Exhibition)

The new tapered carrier tube which has fins on the sides to prevent its turning in the specially-constructed carrier. The fins fit into the carrier, which has slots to receive them, thereby eliminating carrier tube turning.

Ernest A. Feustel, Inc., Highway 17, Lodi, N. J.

For additional data, request item F-203, using business reply card on page 220.

and full size hosiery.

Mimeographed copies of this revised standard may be obtained from Commodity Standards Division, National Bureau of Standards, Washington 25, D. C.

Delaine Spinning System Filmed In Color

Previewed at the National Knitted Outerwear Association's 31st Annual Convention in New York and again shown at the Knitting Arts Exhibition in Atlantic City, the new sound color film "The Delaine Spinning System" marks a milestone in the advancement of

Announcement

Our acknowledged leadership in the most important textile mills all over the world for more than half a century, coupled with a tremendous demand for our equipment has made it necessary for us to open our sister firm—

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Pipe Reaming

THAT SAVES PIPE

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Extra-Long-Taper Reamer won't thin, flare or split pipe

● Secret of the RIDGID's safe easy reaming is its extra long taper. With a few light ratchet turns, you whisk the burr from pipe or conduit without fear of thinning, flaring or splitting. You save time, work *and* pipe. Two sizes: No. 2, ⅛" to 2"; No. 3, ⅜" to 3." No. 2 reamer unit available without ratchet handle for use in RIDGID No. 00R threader handle. Ask your Supply House.

Reamer unit fits RIDGID No. 00R Ratchet Handle.

RIDGID

WORK-SAVER PIPE TOOLS

THE RIDGE TOOL CO. • ELYRIA, OHIO

the wool industry, it is reported.

Depicting the manufacture of wool, blends, and other fibers from top to spun yarn on a modified American system, the film will be presented in four different versions to knitters, weavers, schools, and technicians.

Associated Spinners, Inc., pro-

SYNCHRONIZED CUTTERS ELIMINATE WASTE

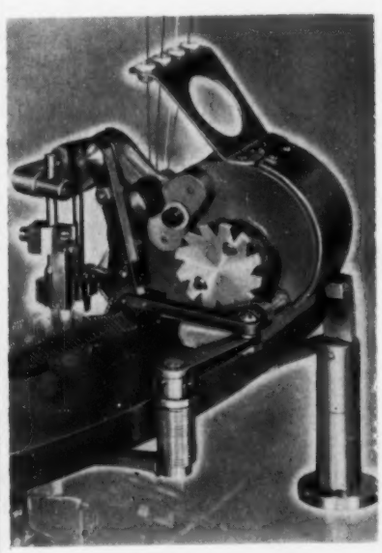
(On display at 39th Knitting Arts Exhibition)

"No-Waste" knitting of variable stripes and plaids is now possible on the Supreme Model SA automatic variable striper and the Model SA-ROF variable stripe and plaid knitter as a result of the development of an automatic cutting mechanism.

These new cutters eliminate all waste normally associated with stripers, the manufacturer claims. Fabrics made on machines equipped with the device are easier to finish since the cloth does not have to be reversed. Also, fabrics are smooth and even in texture.

Supreme Knitting Machine Co., 105 Johnson Ave., Brooklyn, N. Y.

For additional data, request item F-209, using business reply card on page 220.



duced the movie in Gastonia, N. C., at the Delaine Worsted Mills. Milton E. Tager, president of the organization, states that such unrestricted dissemination of textile knowledge is to the best advantage of the entire trade. In accordance with this view, the film will be exhibited to the widest possible audience with special provisions being made for the loan of prints to interested groups.

Mr. Tager also announced that visitors are welcome to observe the Delaine plant in operation, emphasizing withdrawal of all security wraps.

KNIT SHRINKAGE GAUGE

(On display at 39th Knitting Arts Exhibition)

The object of the newly developed Knit Shrinkage Gauge is to evaluate knitted materials from the standpoint of restorability as normally encountered in end use conditions. Normal restoration is accomplished through one or more of the factors of handling, ironing and drawing onto the body. The gauge serves to measure the force necessary to restore a given area of fabric to any predetermined percentage of tolerable shrinkage and so enables the fixation of standards based on restorability.

The shrinkage gauge consists of an inflatable diaphragm in which is set a circle of sample mounting pins, an air pressure and measuring system, and an automatic trigger gauge to release the air pressure when a predetermined sample dimension has been reached.

The advantages of the equipment lie in ease of operation and standardization and the uniformity of action in restoring the material to shape, according to the manufacturer.

United States Testing Co., Inc., Hoboken, N. J.

For additional data, request item F-213, using business reply card on page 220.

Enables battery hands to handle 25% more bobbins

(Winder Hands 3% to 4%)

Applicable to yarn or warp spinning. Designed for one purpose . . . to eliminate uneven packages and tails. The economy and efficiency of Numo Automatic Spinning Controls have been proved in America's largest textile mills.

- Tail or feeler waste is cut 25% to 35%.
- Spindle chokes are virtually eliminated.
- Saves 3% to 4% of doffer's time, thereby increasing efficiency in spinning and production.
- Prevents overrun bobbins and short doffs, thereby assuring full, uniform packages.
- Reduces number of ends down on doff (rail pulled automatically and mechanically at same speed on every doff).
- Enables women to doff as readily as men.

Uniform packages and tails eliminate the necessity of unraveling long tails and "hunting" for ends. This means less bobbin transfer or breakout, as well as reduction in waste yarn. Return on investment has proven to be 33% to 50%. Write today for illustrated literature showing why more and more mills are turning to NUMO for increased production and lower cost.

NUMO MACHINE & ENGINEERING CO., INC.

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Floyd Isom Sls. C., Box 164 Atlanta, Georgia

Ian M. Haldane & Co. Box 54 London, Canada

Walter S. Coleman P. O. Box 722 Salisbury, N. C.

Bernhardt Bros. Export Corp. P. O. Box 748 Charlotte 1, N. C.

James T. Coleman P. O. Box 1351 Greenville, S. C.

for Large Packages and Heavy Yarns

Designed for the large packages used in weaving rugs, blankets, and similar heavy fabrics, these McBRIDE all metal, all welded creels often completely replace warping as yarn goes directly from creel to loom.

Exclusive McBRIDE stiffening truss design (shown below) provides light weight, strength, permitting full air circulation and ample light between creels, thus assisting creeler in locating tubes that are about to run out.

PLUSH TYPE JACQUARD CREEL

Used for weaving pile fabrics of cotton, rayon, mohair, etc., this creel also brings you the benefits of McBRIDE all welded construction plus McBRIDE patented adjustable guide bars.

Write today for the *new folder* on McBRIDE Creels, Rolls and Loom Beams

Manufacturer for the Textile Industry

Mc BRIDE

Edward J. McBride • Adams Ave. and Leiper St. • Philadelphia 24, Pa.

CREELS *for every purpose,* WARP BEAMS • FLANGES • ROLLS

AN EYE ON THE KNITTING MILLS

R. L. James & Son Hosiery Mill, Marion, N. C., men's socks, has doubled the present production with the addition of new knitting machines, loopers, dye machines and boarding forms.

Tabor Hosiery Co., Philadelphia, Pa., has ceased operations and sold its factory building to Acme Specialties, Inc., paper manufacturers.

Monrovia (Calif.) Hosiery Mills, Inc., incorporated last November, is now in full production manufacturing ladies hosiery with 20 full-fashioned machines and complementary equipment. Officers include Kurt Thierfelder, president and manager; Arnold Johnson, secretary and treasurer; and Morris Bernstein, vice-president.

Propper-McCallum Hosiery Co., Inc., Northampton, Mass., men's and women's full-fashioned hosiery, is completing a one-story building at the mill to be used as a dye house. The cost is reported at about $50,000.

Nebel Knitting Co., Charlotte, N. C., women's full-fashioned and seamless hosiery, has work underway on the installation of additional 54-gauge knitting machines and accessory equipment for considerable increased capacity.

Harriet Hosiery Mills, Inc., has been chartered with a capital of 100 shares of stock, no par value, to operate a knitting mill in Columbus, N. C. T. Carlisle Smith, Jr., and Harry Dumont, both of Asheville, N. C., are the principal incorporators.

Hildebran (N. C.) Hosiery Mills, Inc., has been organized with a capital of $100,000 to operate a knitting mill. Frank and James Elliott, both of Hildebran, are the principal incorporators.

Lynn Hosiery Mills, Inc., Mount Holly, N. C., has plans maturing for the construction of a one-story addition, estimated to cost about $50,000, exclusive of equipment.

NEW EQUIPMENT AND MATERIALS

New Staple Fiber Combines Viscose and Acetate Properties

A new chemical staple fiber in the rayon group, called Celcos, has characteristics and properties which promise to open up new avenues of use for all textile fibers, according to the manufacturer.

Combining the best features of both acetate and viscose staple fibers and having in addition an ability to cross-dye, an ease of processing and an absorptiveness for resin and other finishes, Celcos is reported to be an ideal all-purpose rayon staple fiber, either used by itself or blended with other fibers. Fabrics made thus far are said to be ideal for women's suitings and dress goods as well as for many types of men's wear suitings. It is expected that new applications will follow.

Celcos is produced and crimped in predetermined filament sizes and lengths and in both bright and dull lusters; it is more moisture absorbent than acetate rayon staple and less moisture absorbent than viscose rayon staple; is less thermoplastic than acetate rayon staple; and can be dyed with acetate dyestuffs or with cotton dyestuffs, according to the manufacturer.

By itself, or blended with other fibers, Celcos can be processed into yarns on standard types of carding and spinning equipment.

Celanese Corp. of America, 180 Madison Ave., New York 16, N. Y.

For additional data, request item F-105, using business reply card on page 220.

New Tension Pulley Eliminates Tape Slippage

A new self-aligning aluminum tension pulley has been developed for use on Whitin Model A, D and E wool spinning frames.

Designed to eliminate tape slippage and frayed selvages, the tension pulley has a 1¼" crown face that keeps the tape on the center of the pulley at all times. Tape life is more than doubled, it is claimed.

Because there are no collars to collect lint, cleaning and realigning of pulleys is eliminated, and the pulleys help to maintain more uniform spindle speeds, thus increasing yarn quality, according to the manufacturer.

Made of cast aluminum accurately machined to 4" diameter and mounted on two Arguto Oilless bearings, these pulleys require no lubrication.

Arguto Oilless Bearing Co., Philadelphia 44, Pa.

For additional data, request item F-119, using business reply card on page 220.

Micarta Lap Roll

A new lap roll that is made from Micarta and will fit standard lap winders is now available. Micarta is a tough, laminated material that will not chip, dent, or splinter. It is impervious to moisture and consequently does not require a protective varnish coating.

Micarta roll for lap winders (Westinghouse).

The new roll is 46 to 49 per cent lighter than conventional rolls, ac-

NEW TYPE PICKER STICK CHECK

A new picker stick check motion that completely eliminates check straps on regular looms and modernizes the checking movement on gingham box looms, is now in production.

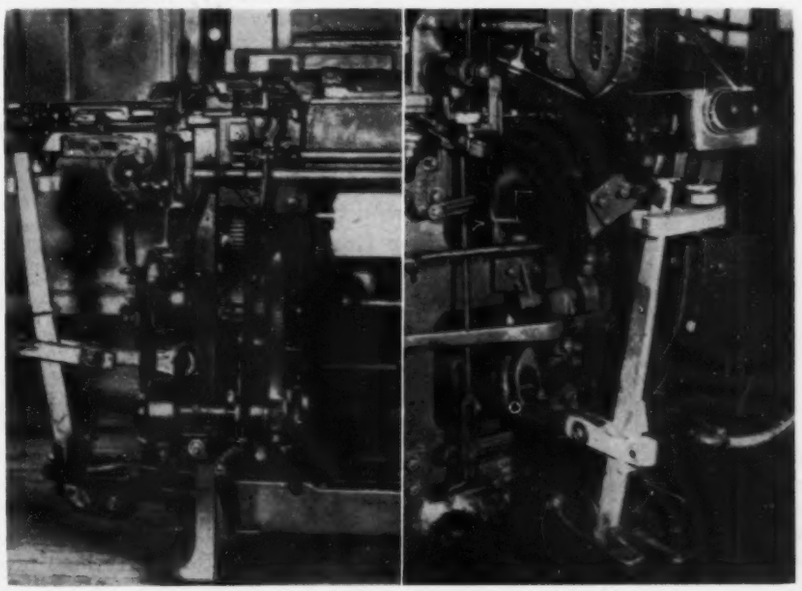
The device is described as a protection to looms against serious slam-off damage. It affords more accurate boxing of the shuttle, eliminates shuttle bounce and helps prevent breakouts, according to the manufacturer.

The life of the shuttle, shuttle box, picker stick and picker is reported increased on looms equipped with the device. The check motion affords accurate timing in change-over, resulting in fewer broken bobbins or quills.

Less down time is another advantage, it was stated, since less time is required for making adjustments.

Precision Research Corp., Charlotte, N. C.

For additional data, request item F-135, using business reply card on page 220.



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-with Whitin and Naismith Combers

PRECISION 10 step Comber Plan

Basically, the PRECISION Comber Plan is the installation of improved drives at certain points for more efficient use and control of power and output. Proved results are: (1) More even drawing, (2) minimum backlash, (3) less noise and (4) lower upkeep. Thus, has the PRECISION Engineering Department and PRECISION'S skill of men and fine machines contributed to lower costs and better quality in the Textile Industry. The PGM 10-Step Comber Plan is PRECISION-Proved and installed, as a whole or in part with a minimum of work stoppage and cost. There can be no better time to modernize. Let the PRECISION Sales Engineer discuss our 10-Step Comber plan with you. Wire or write for further information without obligation.

Precision-Proved for:

- ★ EVEN DRAWING
- ★ MINIMUM BACKLASH
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MACHINERY MODERNIZERS

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GEAR AND MACHINE COMPANY

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Superior Gears

PRECISION is a team of highly specialized men and machines. Its purpose is to design, fabricate, install and service special gears, chain drives and related parts for more efficient Transmission and Control of Motion in Textile Machinery. Proved results for its customers has enabled PRECISION to become the South's largest organization of its type.

DIVISION OF TURNER MANUFACTURING CO.

2001 North Tryon Stree. - Phone 4-6857

THE SOUTH'S LARGEST MAKERS OF GEARS AND CHAIN DRIVES

cording to the manufacturer. This fact, coupled with a more rapid pick-up of the lap during winding, makes it possible to increase production as much as 15 per cent as three pounds of additional cotton can be wound on each lap.

To assure a concentric roll, the Micarta lap roll is put through a centerless grinder. This grinding operation produces a roughened surface on the lap roll and results in a rapid pick-up of the lap during winding, it is claimed.

Westinghouse Electric Corporation, Box 868, Pittsburgh 30, Pa.

For additional data, request item F-118, using business reply card on page 220.

Low Temperature Method for Wool Shrinkage Control

Development of a new process which makes it possible to apply American Cyanamid Company's "Lanaset" resin to wool at a low temperature was announced recently. In the new process the ordinary drying equipment is entirely adequate.

The amount of resin required for shrinkage control with the new process is reduced by 30 to 50 per cent. Another advantage of the new process is that it does not dull delicate shades and the wash fastness of all colors is improved.

Hand of the various fabric types is maintained, according to the manufacturer. A pretreatment of the wool before dyeing and resin application has been found to be desirable in about 85 per cent of the cases.

American Cyanamid Co., Textile Resin Dept., Bound Brook, N. J.

For additional data, request item F-120, using business reply card on page 220.

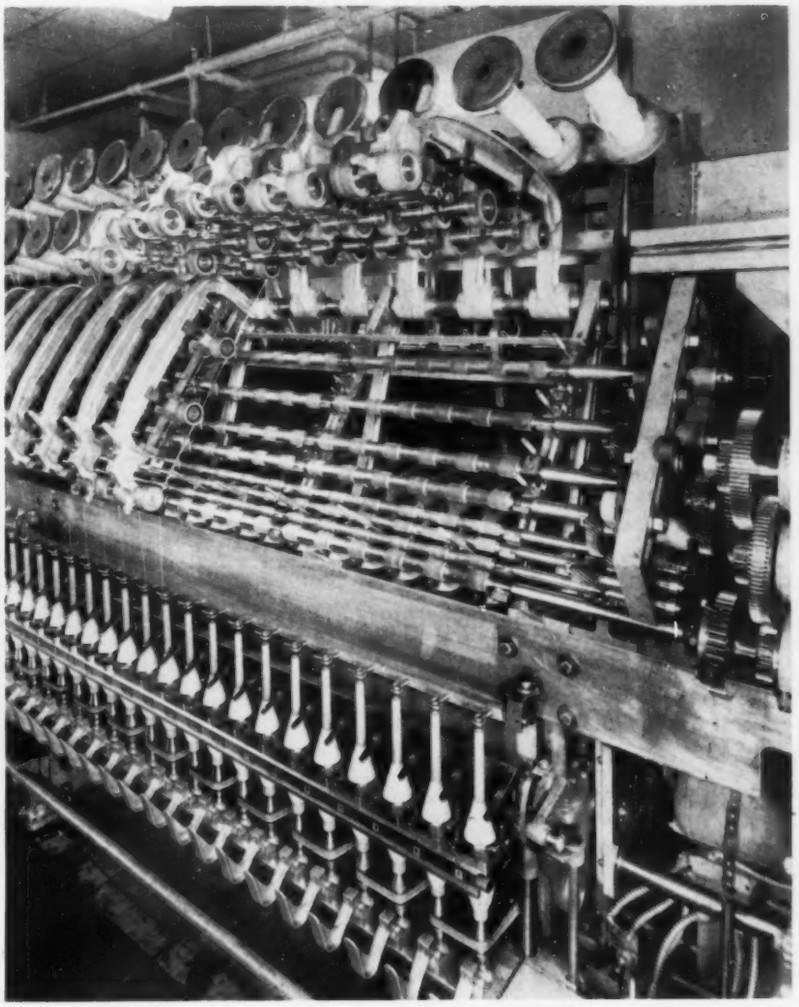
Instrument Indicates and Records Machine Efficiency

The Instant Production Recorder shows, at the moment of its occurrence, the over-all efficiency of all the machines subject to its control in one figure on a dial and also records the facts on a graph for a permanent record and future evaluation. For example, if all of the machines connected to the control system are operating, the recorder shows an over-all efficiency of 100%; if only half of the machines are running, the over-all efficiency will be recorded as 50%.

On occasions when only part of the machines are required, the instrument can be adjusted to show the efficiency of only those machines which are in operation.

The over-all efficiency of all the machines installed and the productive efficiency of the machines in operation are immediately visible at the time they occur. In addition, these two figures, shown on the dial, are currently recorded on a diagram and a meter continuously adds up the actual hours of production of all the machines under observation.

According to the announcement, advantages to be derived from studies with the instrument will result in many savings, such as: Reduced production cost per unit as the result of increased efficiency; savings in supervisory personnel; savings in time study and cost departments; firm basis for cost cal-



BRADFORD TYPE SPINNING FRAME HAS RISING DRAFT FIELD

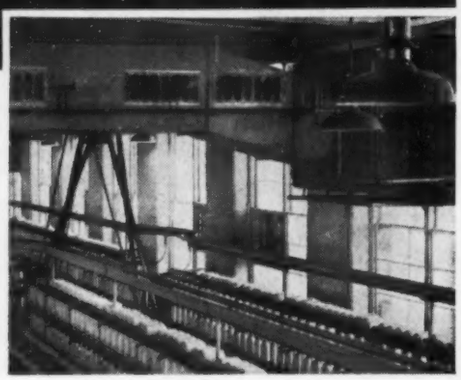
This McGlynn Hays Bradford type spinning machine, now in production, incorporates all of the features of the French type machine manufactured by this firm (see page 79 of the May 1948 issue of TEXTILE INDUSTRIES for complete description).

It differs only with respect to the design of the draft field and creel. To obtain higher drafts of twisted sliver, a two-stage field has been developed providing normal drafts between 15 and 20 and in some cases as high as 30.

McGlynn Hays Industries, Inc., Belleville, N. J.

For additional data, request item F-150, using business reply card on page 220.

Parks AUTOMATIC AIRCHANGER



Maintains desired relative humidity regardless of outdoor weather.

Concentration of power in modern textile mills calls for more humidification. This, and heat factors involved, in turn call for predetermined, mechanical ventilation, varying from season to season, from hour to hour.

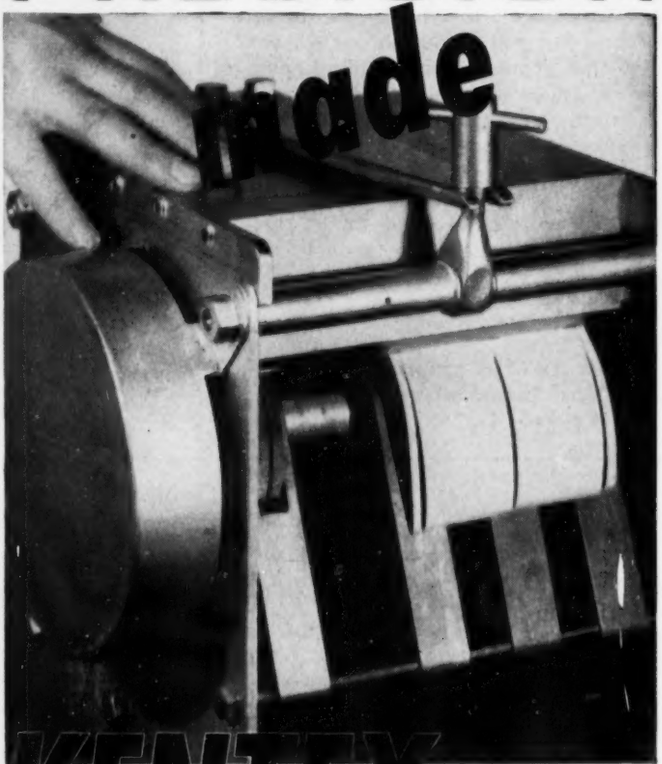
The Parks Automatic Airchanger admits just enough outdoor air, automatically, to keep humidifiers at full capacity during hot dry weather, restricts outdoor air in cold weather.

RESULTS: More constant, more uniform humidity at all times; cooler mill.

Parks-Cramer Company

Fitchburg, Mass. PARKS Certified Climate Charlotte, N. C.

PRECISION made



KENTEX Aprons

Kentex Aprons are made by skilled craftsmen who are apron-building *specialists* . . . with the experience, the most modern machinery and the engineering, "know-how" to build *more uniform* aprons at no higher cost. They are custom-built—of finest bark-tanned or chrome leather—to fit your *exact* requirements.

If you are looking for absolute uniformity between all aprons in the same shipment, and with your previous orders, let us send you free samples of KENTEX Precision-Built Aprons.

TEXTILE APRON COMPANY

EAST POINT, GEORGIA

J. B. KENNINGTON, OWNER

Instant Production Recorder.

culation and setting of piece rates, etc.

Textile Industry Research, Inc., 22 East 40th St., New York 16, N. Y.

For additional data, request item F-133, using business reply card on page 220.

High Speed Drying Oven for Laboratory Use

A recently developed oven dries test samples of liquids, solids, fibers, etc., twice as fast as conventional laboratory ovens by driving hot, filtered air at high velocity through the drying chamber, according to the manufacturer.

Any selected drying temperature from 190 F to 320 F can be reached from a cold start in one minute and thereafter uniformly maintained within 1%. If any change in drying temperature is desired between tests, it can be made in one minute or less. Opening the drying chamber door to load or unload does not change the temperature inside.

Drying cycles up to 30 minutes are accurately controlled by an automatic built-in timer.

Harry W. Dietert Co., 9330 Roselawn Ave., Detroit 4, Michigan.

For additional data, request item F-131, using business reply card on page 220.

High speed oven (Dietert).

Continuous Bleaching Unit for Small Plants

A new single stage bleaching unit, known as the Butterworth "Junior" Bleaching Unit, has been announced High speed continuous bleaching is now possible in a fraction of the space formerly required, it is claimed.

Knit goods or cotton piece goods can now be bleached in an area 13 feet long and 16 feet wide. The machine handles cloth at an average of 50 yards per minute.

The unit is especially designed for the limited production finishing plant where production does not warrant a full-sized continuous bleaching range. Outstanding features claimed are the new "U" type washers and saturators made of stainless steel with round corners. The machine is a complete operating job fully equipped with squeezers, washers, saturator, J-box, reels, motors, instruments and auxiliary equipment.

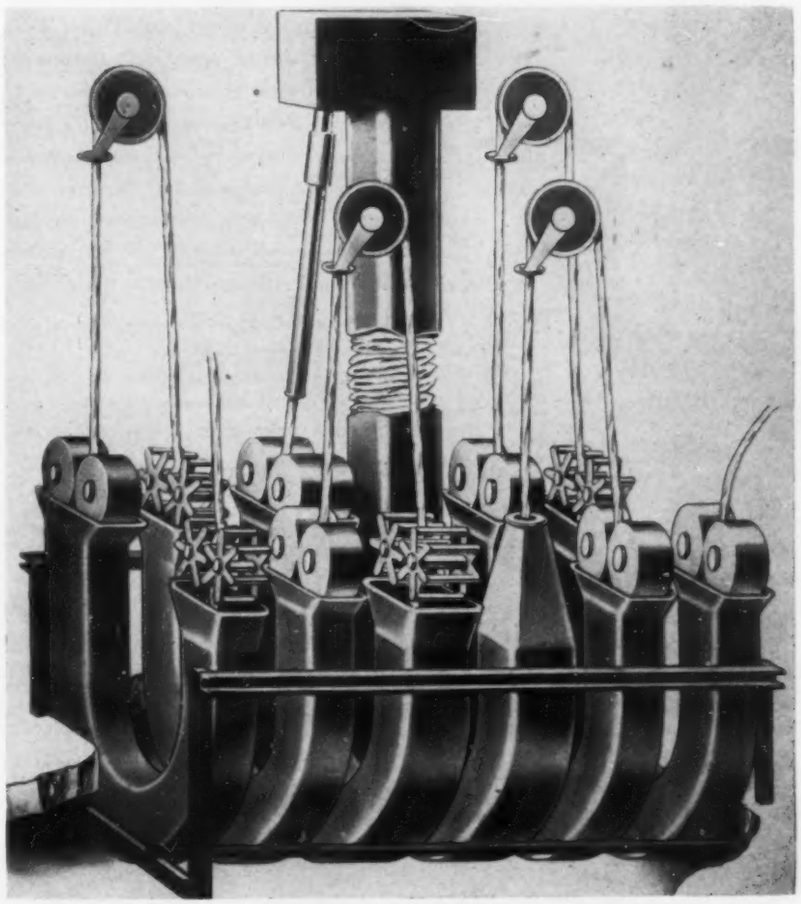
The single stage system consists of: One standard squeezer; four "U" type washers; one "U" type saturator; one "J" type bleaching compartment and four "V" type reels. The unit is also available as a two-stage system.

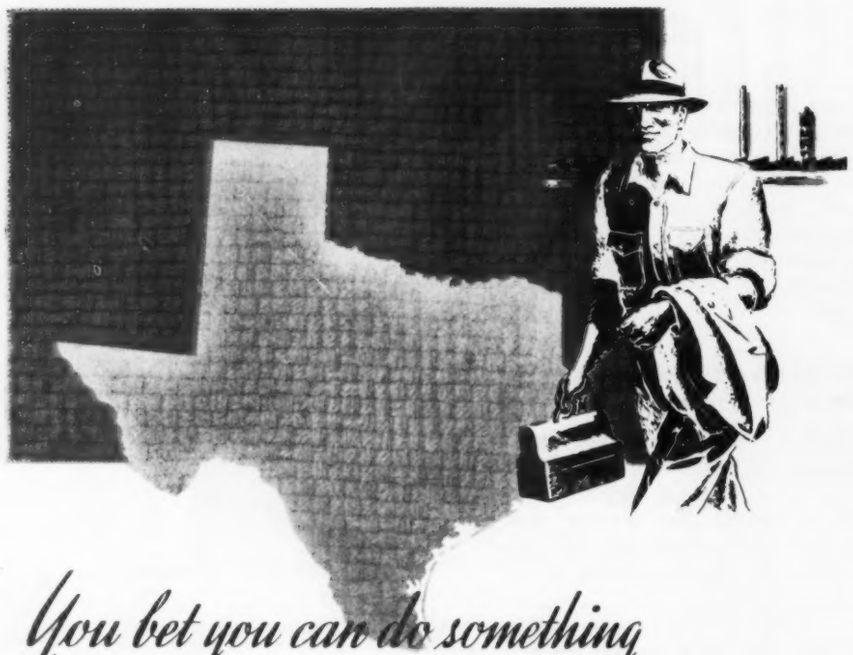
Compared to kier bleaching the new unit saves up to 75% in steam and 10% in chemicals, according to the manufacturer. Only one man is needed to run the unit.

H. W. Butterworth & Sons Co., Philadelphia 25, Pa.

For additional data, request item F-107, using business reply card on page 220.

"Junior" high speed continuous bleaching unit (Butterworth).





You bet you can do something about the weather!

You can move your mill to the Texas Coast, where the climate, from January through December, is a mean 69.2° F.* That means a lot to textile companies that have had to foot the bills for heavy construction against the bleak winters and dank cold of other regions. And look at these other advantages it will be your good fortune to enjoy: Your vital resources—cotton, wool and mohair—available at your mill's back door; transportation by rail and water; a reasonable tax structure (no State income taxes); an intelligent, cooperative population. All this with natural gas—the textile industry's most economical and efficient fuel.

*At Houston, chief city of the Texas Coast.

Write, wire or telephone for a detailed survey, or special information. Or visit us; it will be a real pleasure to show you around.

HOUSTON PIPE LINE CO.

Subsidiary of Houston Oil Company of Texas GEO. A. HILL, JR., President

Wholesalers of **Natural GAS**

Good fortune awaits textiles in Texas:

Raw fibres—(33% of U. S. cotton, 23% of U. S. wool, 94% of U. S. mohair) • unsurpassed rail and water transportation • a fine, mild climate • excellent industrial relations • an abundant supply of economical, efficient natural gas for fuel.

Mothproofing Compound Withstands Cleaning

Boconize, a new durable mothproofing compound, is applicable to any fabric manufactured from wool, hair or other animal fibers.

There are two types of the compound. The first, Boconize LCB, is recommended for use on all woolen articles generally considered nonwashable. It is guaranteed to mothproof woolens through 50 dry cleanings and five washings, made in accordance with AATCC specifications. The second, Boconize WD, is advised for use on washable woolens; it is guaranteed against 25 dry cleanings or 10 washings of the AATCC type.

Boconize combines chemically with the protein fiber in fabric, becoming an integral part of the cloth.

Advantages claimed are that Bo-

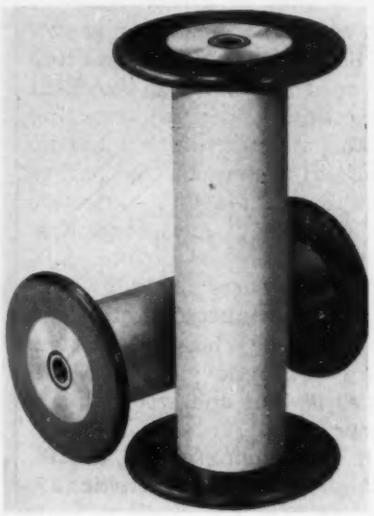
NEW FLOW GUIDE

A new rate of flow indicator that is equally useful for clear and opaque streams is now available. It is a unique adaptation of the area principle of flow measurement.

The Magna-Sight flow guide measures maximum flow rates of 3.5 to 250 gpm. Features claimed by the manufacturer are: Through-bolted construction makes it easy to disassemble; it has just one moving part in the fluid stream; fits right into a vertical section of pipe; and has high pressure ratings.

Fischer & Porter Co., Hatboro, Pa.

For additional data, request item F-110, using business reply card on page 220.



NEW BOBBIN FEATURES REPLACEABLE PARTS

A spinning or twisting bobbin entirely new in design and construction, has been announced. In addition to resisting the "crush" of nylon or similar synthetic yarns, the new bobbin is long-lasting.

The outstanding feature of the bobbin is that all parts are replaceable.

Cloverleaf-Freeland Corporation, Hazelton, Pa.

For additional data, request item F-104, using business reply card on page 220.

conize is non-odorous and easily applied; it does not alter the appearance or "feel" of the textile.

Bocon Chemical Corp., 45 East 17th St., New York 3, N. Y.

For additional data, request item F-132, using business reply card on page 220.

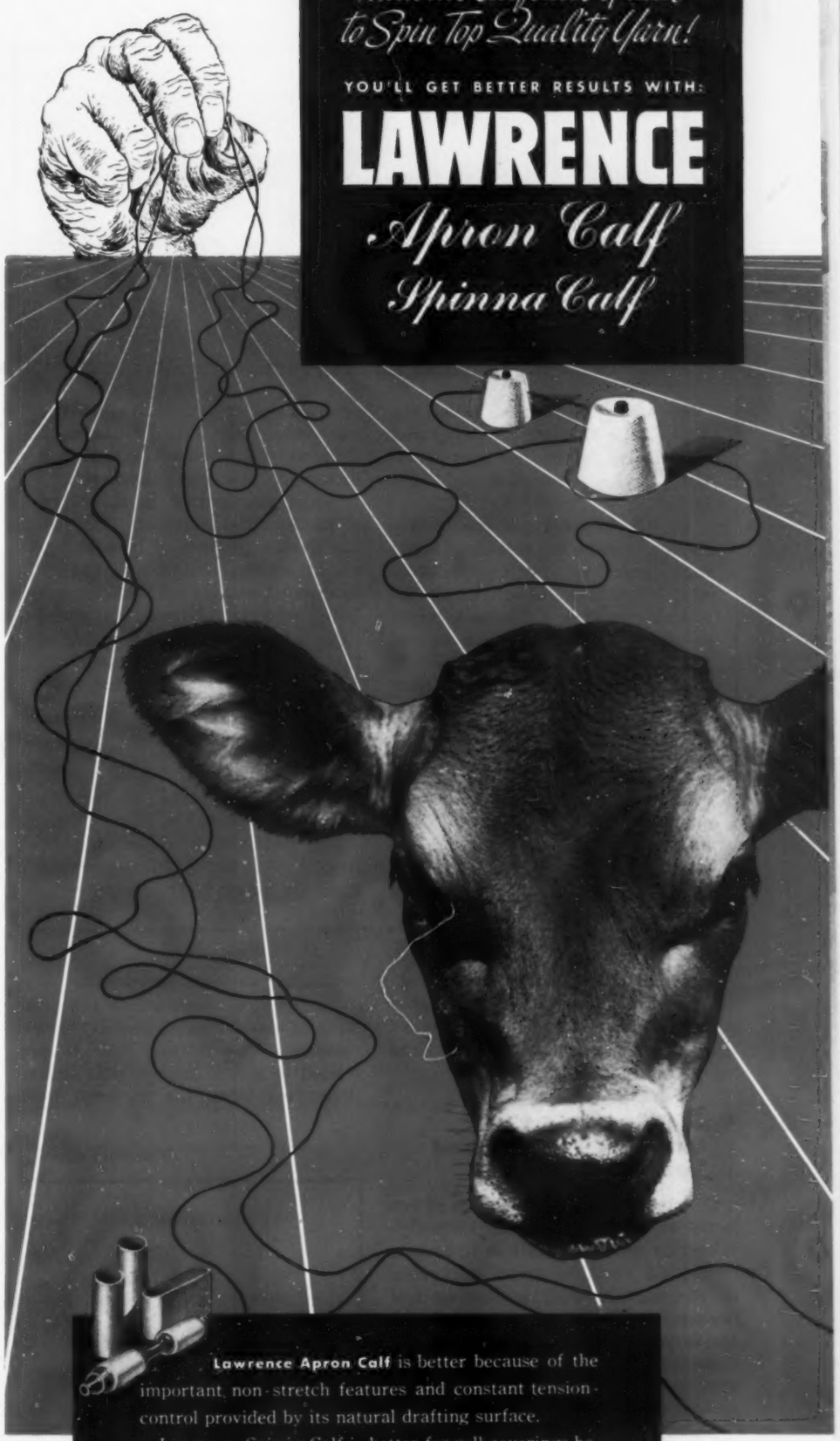
"The Story of Silk"

A descriptive history of the silk fiber is presented in the 361-page book, *The Story of Silk*, by William F. Leggett, recently published by Lifetime Editions, Inc., 435 East 24th St., New York 10, N. Y. ($5.00)

In this history of silk Mr. Leggett, author of *The Story of Linen* and *The Story of Wool*, has traced the

Correction

The caption story entitled 'Bale Clamp for Lift Truck" appearing on page 201 of the May 1949 issue, was erroneously illustrated with a photograph of a clamp truck manufactured by The Baker-Raulang Co., and described on page 195 of that issue.



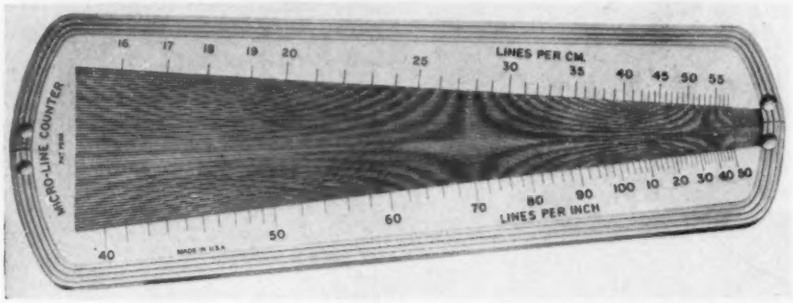
Lawrence Apron Calf is better because of the important non-stretch features and constant tension-control provided by its natural drafting surface.

Lawrence Spinna Calf is better for roll coverings because of its smooth, positive drafting surface, triple resilience, resistance to "slicking" and elimination of "eyebrowing".

A. C. LAWRENCE LEATHER COMPANY, PEABODY, MASS.
REPRESENTED BY H. H. HERSEY, GREENVILLE, S. C.

A. C. LAWRENCE LEATHER CO. TEXTILE LEATHERS PEABODY

LAWRENCE TOP NAME IN ROLL COVERINGS



NEW INSTRUMENT COUNTS PICKS INSTANTLY

This new instrument, called the Micro-Line Counter, instantly and accurately determines the number of warp ends and picks per inch.

In the weave room the instrument is handy for obtaining readings needed for quick adjustment of take-up and let-off. Cloth inspectors can use it to check fabric construction. Dyers, bleachers and printers will find it convenient for estimating shrinkage after processing and for analyzing fabric construction.

The counter consists of multiple layers of transparent plastic, surrounded by a satin-finished brass or gold-plated metal frame. The instrument is 6¼" long and the width tapers from 2¼" to 1¾". On the field is engraved a series of precise, converging lines—along the sides are the calibrations showing the number of lines per inch and lines per centimeter.

When the counter is placed on a fabric, the inscribed lines on the device produce a lens sharpened, intense moire pattern against the body of the underlying material. Where the moire lines converge, the exact count of the fabric is read on the scale.

The counter is calibrated from 40 to 150 lines per inch. By merely multiplying or dividing by 2 reading may be obtained up to 300, and as low as 20.

Micro-Lite Co., Inc., 44 W. 18th St., New York 11, N. Y.

For additional data, request item F-101, using business reply card on page 220.

NEW SURFACE ACTIVE AGENT

The first in a new series of surface active agents is known as Surfax 1288. It is a wetting agent which also has excellent rewetting properties, according to the manufacturer; it has no marked detergent properties and is reported to be effective in extremely low concentrations.

Possible uses include compressive shrinkage; wetting out and dyeing hosiery, cotton, wool, synthetic yarns, and all types of knit and woolen piece goods.

E. F. Houghton & Co., 303 W. Lehigh Ave., Philadelphia 33, Pa.

For additional data, request item F-214, using business reply card on page 220.

progress of silk and its culture from the earliest ages to reasonably modern times. A short glossary of silk names in general use and bibliography are included.

Variable Speed Unit Controls Tension and Velocity

Constant tension and control of velocity of web material can be maintained by use of a sensitive hydraulic controlled variable speed unit used in conjunction with a floating roll mechanism. This arrangement can be employed to keep machines in synchronism or to maintain uniform tension of goods between two machines or two sections of the same machine.

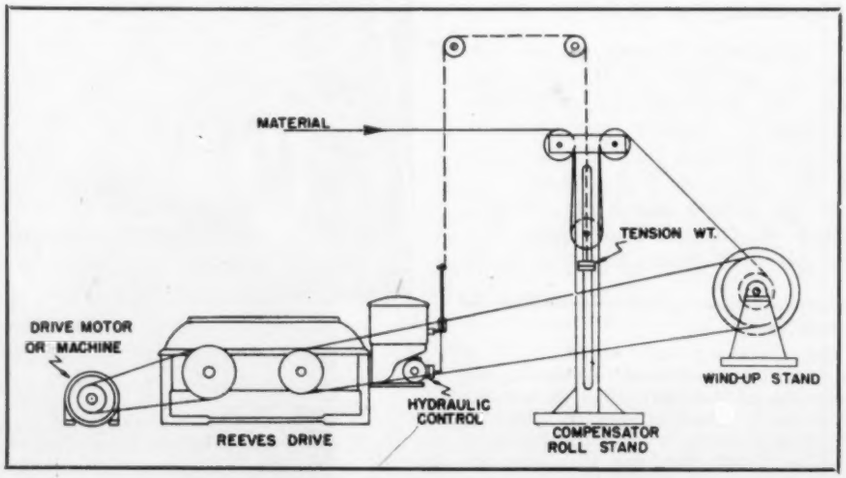
Material such as cloth, rope, etc., delivered from one machine passes over a fixed roll, under a floating roll, over a second fixed roll and into the next machine or wind-up drum. The floating roll is connected to the speed control lever of the hydraulically controlled variable speed unit.

The control operates on the principle of controlled tension in the web material. The floating roll is preloaded to give a desired web tension, depending upon the material being processed. It is the natural tendency that as the roll increases in diameter, the velocity of the material also increases. This builds up an initial tension in the web causing the floating roll to rise. Once the floating roll starts to rise, it continually rises throughout the complete wind-up indicating a continual speed decrease of the variable speed unit, giving constant velocity to the web. Since the tension is dependent upon the velocity, the tension also remains constant.

Reeves Pulley Co., Columbus, Indiana.

For additional data, request item F-113, using business reply card on page 220.

Variable speed control unit (Reeves).



AMACEL* COLORS
answer the demand for better color fastness
in synthetic textiles.

Better than ever—

NEW, high quality AMACEL

A dye group for every requirement

- ***Piece goods—box or jig***
- ***Acetate yarn***
- ***Nylon hosiery***
- ***Printing—screen and machine***

The new, high quality *Amacel* colors offer to a greater degree than ever, better fastness—simplified application—consistent shade purity. They're highly dispersed, practically water soluble. All *Amacel* colors have good "pile on" —all are level dyeing. A range is available for discharge work.

American Aniline was the first successful U.S. producer of dyes designed especially for acetate fibres, and high quality has kept *Amacel* colors at the top in this field.

For detailed information on the whole range available, as well as data regarding your own particular requirements, consult our nearest branch. A.A.P. technicians are always happy to be of service.

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50 Union Square, New York, N. Y. • **Plant: Lock Haven, Pa.** • **Branches:** Boston, Mass. Providence, R. I. • Philadelphia, Pa. • Charlotte, N. C. • Chicago, Ill. • Los Angeles, Cal. Chattanooga, Tenn. • **Dominion Anilines & Chemicals Ltd.** • Toronto, Canada • Montreal, Canada

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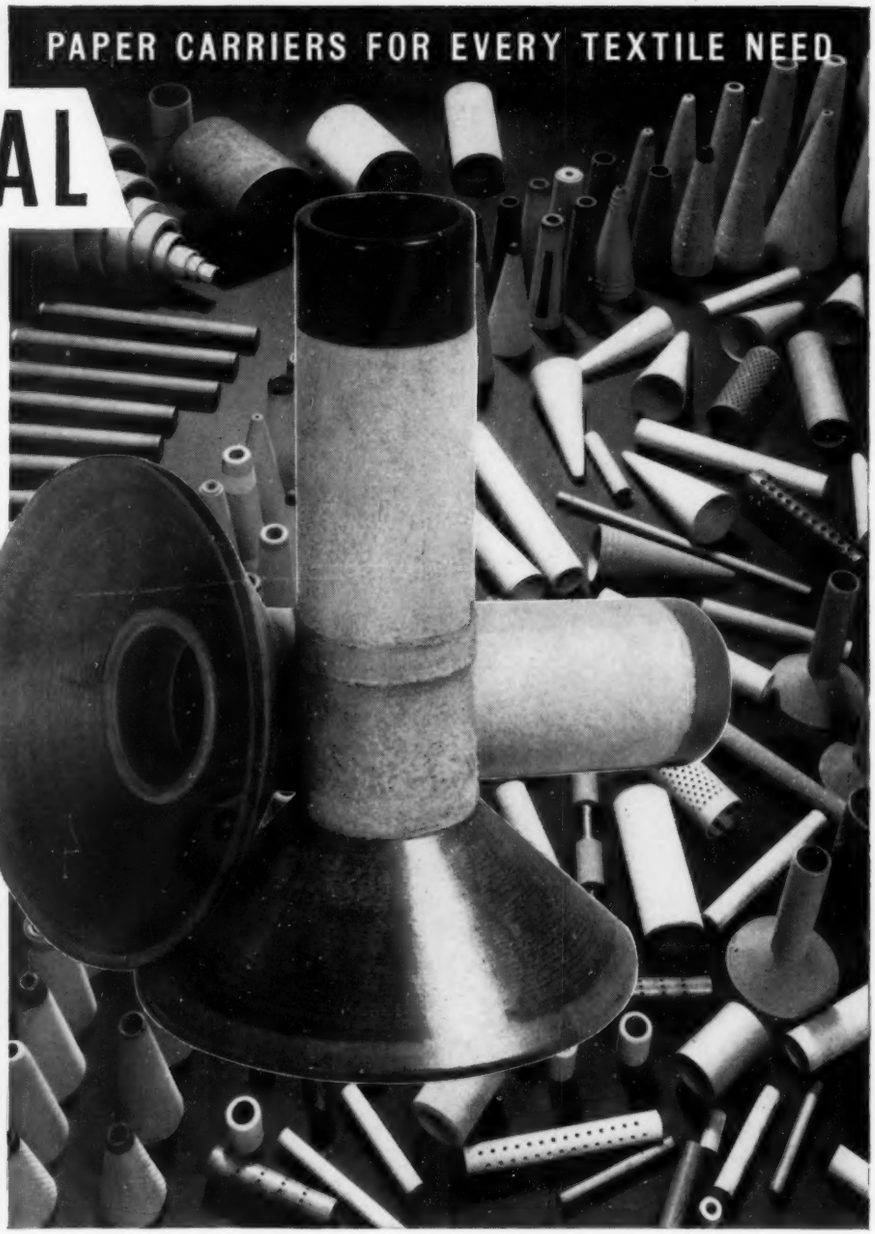
INDUSTRIAL THREAD *Package*



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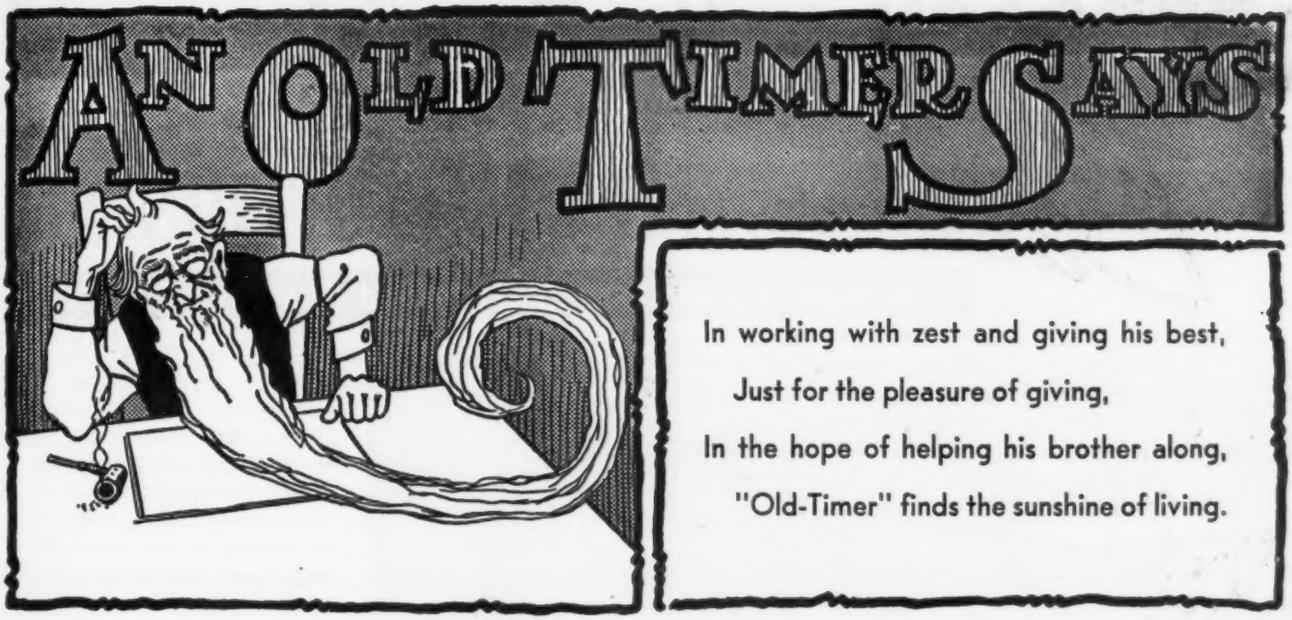

AN OLD TIMER SAYS
In working with zest and giving his best,
Just for the pleasure of giving,
In the hope of helping his brother along,
"Old-Timer" finds the sunshine of living.

YOU: Your Personality

YEAH! What are you doing about it? Have you talked to yourself about your personality? Gosh! That's a heck of a question, isn't it? Well, we don't know any better or plainer way to get you to understand what we are driving at. You often talk to your associates about other people's personalities, but we vouch you haven't talked to yourself about *your* personality.

Well, brother, you had better get busy because "t'aint like it used ter be" when a fellow could get a job simply because he was a good manufacturer: meaning he knew textile machinery and how to operate it efficiently. No sir, not by a long shot!

Seriously, gentlemen, this item of personality is looming up to more importance every day. But think back through these articles* to each subject we have discussed with you; haven't we given you simple illustrations to prove the lessons we are trying to get you to use? Yes, illustrations which you probably classed as first grade stuff, but you will have to admit that they are true to life and true to human nature illustrations, even if you had never in your life experimented with putting your other arm through your coat sleeve first.

Therefore, we say that there is nothing to be alarmed about when we begin considering your personality. If you do not have a good personality, you can start building one. If you have what is termed a good personality, you can most assuredly improve on what you already have.

Go back to our illustration about lifting gear blanks. If at first you can only lift or hold out three pounds, but by practice for six days can hold out four pounds, you have proved to yourself that you can progress—you can improve—if you really want to and that is all the man can do who starts off by lifting 10 pounds of gear blanks and progresses to where he can lift 12 or 15 pounds. The point is, it matters not how your assets stack up on personality, you can improve—you can add to what you have if you are man enough to get at it and keep at it just like you went at learning to fix looms, grind cards, or anything else. In fact, if you have already made some progress in eliminating bad habits—if you have made some progress in training your memory —you have already started to improve your personality, whether you realize it or not.

Personality cannot be measured in dollars. This quality is so outstandingly valuable in young men today that many large industrial firms have men who visit colleges throughout the year, interviewing and otherwise checking on the graduating classes to find those young men susceptible to being trained in human relations. We have just read some comments on one of these reports. They do not want men who are just barely getting through in their studies, of course, but they will tell you frankly that if a young man is only *average* in his studies, if he shows a disposition that leads them to believe he can be trained as mentioned, they will take him rather than the head of the class who does not show these qualities.

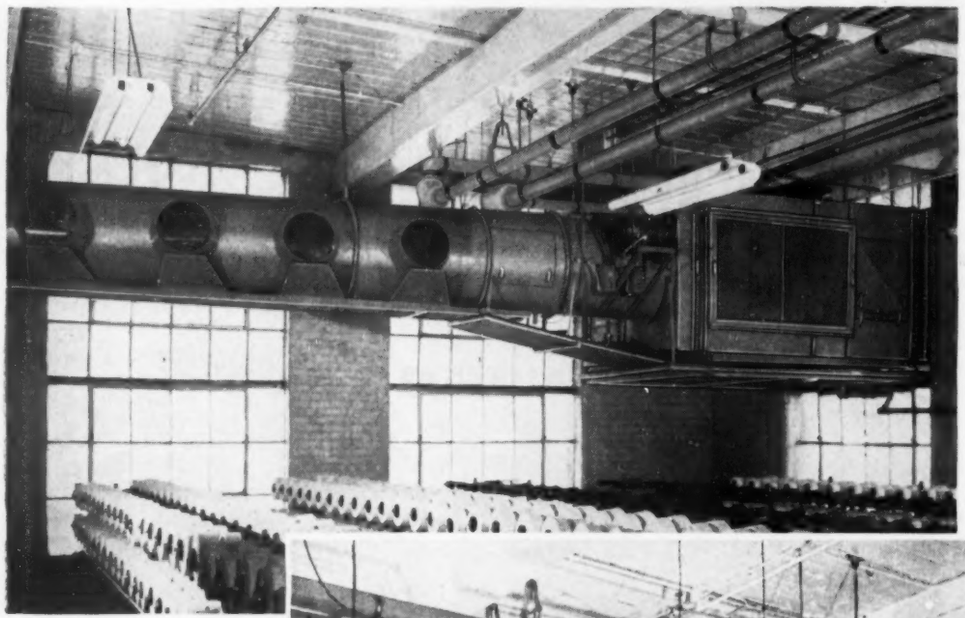
This confirms our contention that textile mill executives no longer select men for promotion because of their ability as expert manufacturers, but rely more upon the man's personality to make him a successful operating executive. Don't lose sight of the fact that personality as we are referring to it here takes in a man's qualities

*Old-Timer articles on the subject of "You" appeared in the January, February, March and April 1949 issues of TEXTILE INDUSTRIES.

APPROACH, to the Future!

Bahnson AIR CONDITIONING

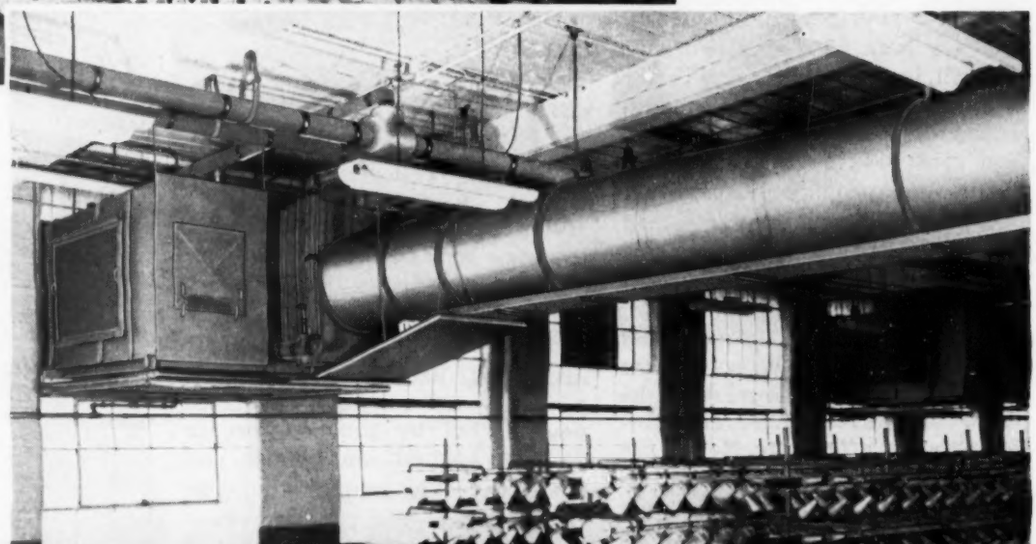
FOR YEAR 'ROUND TEMPERATURE and HUMIDITY CONTROL



The Bahnson Humiduct provides a basic unit system for evaporative cooling and controlled humidity to which refrigerative cooling, heating, air filtering in any combination can always be added. The Bahnson Humiduct unit is both flexible and economical, can be expanded or easily moved. No fixed, built-in installation or expensive apparatus housing required for air handling equipment.

↑
HUMIDUCT INSTALLATION TO PROVIDE EVAPORATIVE COOLING AND HUMIDITY CONTROL.

HUMIDUCT INSTALLATION PROVIDING HUMIDITY CONTROL WITH REFRIGERATIVE COOLING. →



Mills, "looking to the future," can approach the problem of eventual complete air-conditioning by degrees—starting with the Bahnson Humiduct basic unit as now functioning in many important installations.

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AIR CONDITIONING ENGINEERS

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to understand human relations, or as it is more commonly referred to, his ability to work people.

Generally speaking, the things which appeal to individuals also appeal to groups of operatives. Or we suppose to be more definite, we should say—to the majority of all groups of operatives. You know Christ could not please all of the people. He had his enemies just as you will have your enemies. Remember, gentlemen, when you can reduce the number of your enemies by just one, you are making encouraging progress. You are building up your personality and adding greatly to your assets. Many men are possessed with the faculty of making friends, but the man who can make a friend of an enemy—well he is tops, that's all.

Do you know which of your operatives made the highest production last month or for the last three months. If so, you are missing a great opportunity to build up morale if you do not let those operatives know that you appreciate their efforts. If you do not know who those operatives are, you just simply are not on the job and are getting nowhere fast.

There is some good in all operatives, you know. Your job is to find out about it and let them know that you know it. Don't forget, there is some good in your enemies, too, and boy will they be surprised when you tell *them* you know it. The man of personality never lets pass an opportunity to praise an operative who deserves it.

Don't misunderstand, OLD-TIMER is not advocating that you do nothing but go around patting people on the back. Goodness no! Operatives have no respect for the man who does not demand discipline. But a man can be firm without showing anger. When you show anger the other fellow wants to show some anger, too. That usually ends in a deadlock and no one gets anywhere.

Remember the illustration that we gave you in an article several years ago? It was about a dog. This dog would come tearing out from behind the house, barking his head off, everytime John passed. If the dog came too close he would kick at him. John got an idea. He

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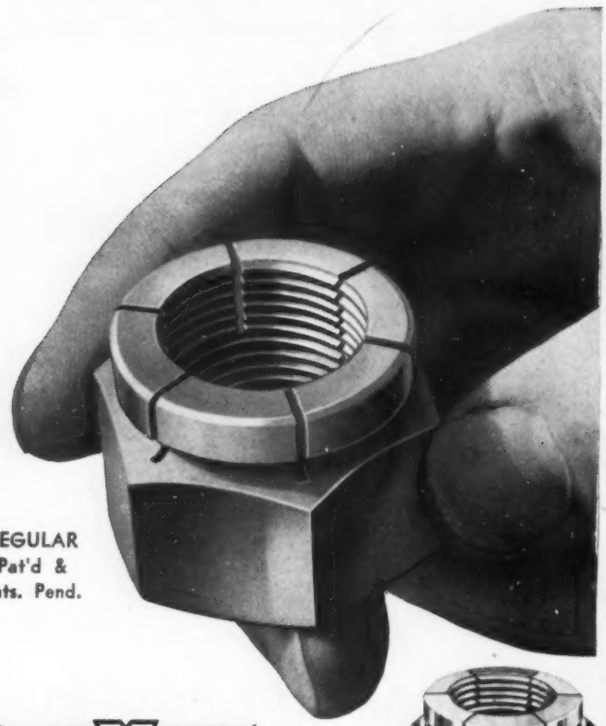
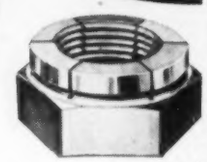


REGULAR
Pat'd &
Pats. Pend.



THIN

FLEXLOC

ONE-PIECE SELF-LOCKING NUTS

. . . WON'T SHAKE LOOSE

. . . REDUCE MAINTENANCE

Invariably, when nuts loosen, they cause shutdowns, loss of production, and bad tempers all around. All this can readily be eliminated by installing the one-piece, self-locking "FLEXLOC", because *it positively will not shake loose* and positively cuts cost of maintenance.

The all-metal, one-piece resilient "FLEXLOC" is becoming increasingly popular, because it is processed to have an exceptionally uniform torque and, because it packs a stop, lock and plain nut all in one. "FLEXLOC" accommodates itself to a wide range of thread tolerances and can be used over and over again without losing much of its torque. And, being a stop nut, it stays locked in any position on a threaded member. It is not affected by temperatures commonly met.

Available in "thin" and "regular" types —in sizes from No. 6 to 2" in diameter— in NC and NF thread series. Write for your copy of the "FLEXLOC" Catalog.

OVER 46 YEARS IN BUSINESS

SPS STANDARD PRESSED STEEL CO.
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"Serving Industry continuously since 1903 through Industrial Distributors"

NEW DAMP-TEX ENAMELS REVOLUTIONIZE INDUSTRIAL PAINTING

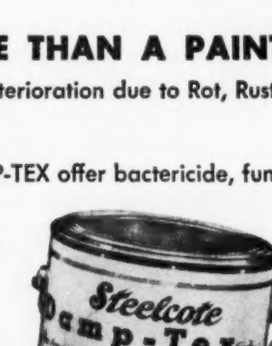
DAMP-TEX Regular has no flavor-tainting odor. White is now whiter. It is safe to use around foods. Dries in a few hours. Resists normal alcohol, acid and alkali conditions.

DAMP-TEX No. 2 dries in 30 minutes. Resists extreme acid, alkali and alcohol conditions.

DAMP-TEX IS MORE THAN A PAINT

It's a complete system to stop deterioration due to Rot, Rust, Fungus and germs.

Both Regular and No. 2 DAMP-TEX offer bactericide, fungicide and rust inhibiting pre-treatments. Go on wet surfaces, as well as dry.



DAMP-TEX is easy to apply, dries to a porcelain-like finish with a high, light-reflecting beauty that washes like glass. Lasts for years. Used by more than 8,425 plants.

NO RISK TRIAL OFFER

Just write across your letterhead, the word DAMP-TEX and mail to us. We'll send you details of our no-risk trial offer. Warehouse stocks near you.

STEELCOTE DAMP-TEX ENAMELS No. 1 and No. 2

STEELCOTE MFG. CO. • ST. LOUIS 3, MO.
IN CANADA: STANDARD PAINT & VARNISH CO., LTD., WINDSOR, ONT.

began talking kindly to the dog, and one day stopped long enough to get the dog calmed down while he patted him on the head. Always after that day the dog would come out wagging his tail for John to pat him on the head.

This not only illustrates one way of converting enemies into friends, but it more nearly explains that old, old adage which says, "Love brings love and hate brings hate." That, gentlemen, is one of the fundamental facts of human nature; human relations, if you please.

In winding up this discussion of "You," we believe you will have to agree that there is nothing complicated in progressing from "what you are" to "what you can be;" therefore, if you want to get into that bracket which will cause you to pay Uncle Sam about double the income tax you are now paying, "get started."

"Cotton" Pictures

In April 1941 Marguerite Sease began to "cotton" pictures. She does not use anything that an artist would use—no brushes, paints, canvas, easels, models, etc.

Her first attempt was to make long necked birds with a soft bit of cotton which she later found out was rayon. Dyeing the material with mercurochrome, she fashioned flamingos; then with other drugs she began making scenes of negroes at work and play.

With deft fingers she shapes raw cotton into figures of people, birds or flowers against a background of croakus sack (burlap) or velvet.

Mrs. Sease thinks there is a great deal more to this use of cotton than the way she has been distributing her messengers of making people cotton conscious. Why not textile designs for wall papers, magazine covers and advertisements, booths and shop windows, and dress fabrics?

There is no media of art that can depict the illusion of the bridal veil, petal softness of flowers, softness of clouds, snow and feathers, as can cotton, according to Mrs. Sease.

INTRODUCING

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A REVOLUTIONARY CHLORINATOR PRICED BELOW $1000

New in every sense of the word . . . no poppet valves, no bell jars, no water seals . . . just an assembly of standard instruments! It's simple—it's inexpensive—it's versatile—it's accurate—it's compact. Maintenance costs are negligible.

Three standard models cover every chlorine requirement—municipal, industrial, or swimming pool. Prices start at $300. Solution feed, dry gas feed, or hypochlorite for flow rates as low as 5 lbs. per day.

Be sure to get your copy of Catalog 61 which contains an illustrated description of RATO-CHLOR dispensers now used in more than 100 installations.

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230 Park Ave.
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WHAT THE TEXTILE MILLS ARE DOING

Stockholders of the **Dallas Manufacturing Co.**, Huntsville, Ala., carded sheetings, recently voted to liquidate the company.

United Rayon Mills have work well advanced on the addition to the mill in Elberton, Ga., which will practically double the size of the plant. The project will represent a reported investment of about $500,000.

Bryant Finishing Co., Inc., Fall River, Mass., has been chartered with a capital of 999 shares of stock, no par value, to operate a dyeing and finishing mill. Thomas H. Bryant is president and treasurer.

Hathaway Mfg. Co., New Bedford, Mass., cottons and rayons, has let general contract for a one-story addition, to be equipped as a fan house. The cost is estimated at about $26,000.

Alexander Smith & Sons Carpet Co., Yonkers, N. Y., has awarded general contract for a factory branch warehouse and cut-order building in Minneapolis, Minn., estimated to cost about $400,000, with equipment.

Nashua (N. H.) Textiles Co., Inc., recently organized, has operations underway in a section of the Jackson Mills, for the manufacture of cotton fabrics for automobiles, footwear and other service. Robert Hamblett is president.

Cliffside Dyeing Corp., Paterson, N. J., has work underway on a one-story addition, to be equipped as a laboratory for testing and other service.

New Yorker Textile Print Corp. has been organized with a capital of 100 shares of stock, no par value, to operate a textile print works in New York, N. Y.

Carthage (N. C.) Weaving Co., tarpaulin, treated duck, etc., has work underway on the installation of additional equipment, including 46 new looms, for increased capacity.

The recently organized **Pearl Mill**, Casar, N. C., will soon begin operation for the manufacture of coarse

YOU can eliminate bearing troubles on applications where lubrication is difficult or liable to be neglected. Johnson Graphited Bearings are designed for 40 to 45% graphite contact with the shaft, thus supplying constant free-running without further lubrication. In addition, Johnson Graphited Bearings are highly desirable where ordinary lubricants may damage food, textiles and other goods in process. They are widely used on conveyor rolls, immersion rolls in textile and paper industries, pumps handling corrosive liquids, and many other heavy-duty applications. Johnson Graphited Bearings are manufactured in cast bronze and sheet bronze. They are available in serrated and in plug types as illustrated. If you have such a troublesome bearing problem, write, wire or call for further information.

Graphite held permanently in place. Graphite area increases with wear. Not soluble in gasoline, oil or water.

●

SELF LUBRICATING LEDALOYL bearings, produced by powder metallurgy, are widely used for hard-to-lubricate applications where heavy-duty service is not an important factor. Johnson Bronze engineers will be glad to advise which type, Ledaloyl or Graphited, will best fit your requirements.

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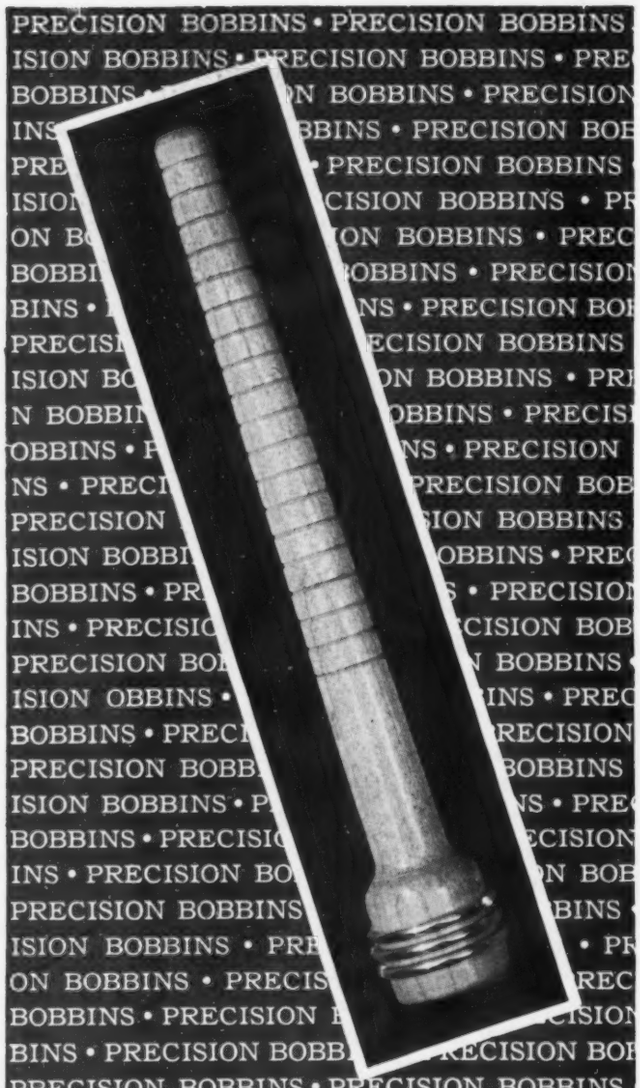
SLEEVE BEARING HEADQUARTERS
530 SOUTH MILL STREET • NEW CASTLE, PA.



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ATLANTA 1, GEORGIA

carded yarns. R. J. Woods heads the concern.

Groves Thread Co., Inc., Gastonia N. C., has completed the construction of a two-story addition and installed equipment for considerable increased capacity. The project represents an investment of about $150,000.

High Point (N. C.) Weaving Co., a division of Burlington Mills Corp., rayon piece goods, has plans for improvements in the mill reported to cost about $175,000. Additional equipment will be installed.

Moore Fabric Co., Pawtucket, R. I., narrow cotton fabrics, has let general contract for a one-story addition to the mill. The cost is reported to be over $600,000, with equipment.

Bousquet Spinning Co., Inc., has been chartered with a capital of 600 shares of stock, no par value, to operate a cotton mill in Woonsocket, R. I. Sidney Silverstein is the principal incorporator and representative.

Carolina Mills, Inc., carded yarn, has resumed production at its No. 1 mill in Dillon, S. C., following curtailment last August. No. 2 mill of the company also is in regular operation.

J. P. Stevens & Co., Inc., New York, N. Y., has closed bids for a one-story mill at Kollock, S. C., to be equipped as a finishing plant, and will include a filter plant and pumping station.

Laurens (S. C.) Mills, Inc., fine cotton and rayon fabrics, has work in progress on a five-story addition, to provide for considerable increase in present output.

Sagamore Thread & Sales Corp., Boston, Mass., has been incorporated with a capital of 100 shares of common stock, no par value, to manufacture thread, yarns and kindred products. Jack M. Pizer is president and treasurer.

Everlastik, Inc., has been chartered with a capital of 1500 shares of stock, no par value, to take over and succeed to Everlastik Corp., Chelsea, Mass., manufacturer of elastic webbing, bindings, trimmings, etc.

Hayward Schuster Woolen Mills, Inc., East Douglas, Mass., has reinstated about 75 employees at the mill, following a curtailment of operations several months ago, and contemplates resuming a full capacity basis in the near future.

Attleboro (Mass.) Dye & Finish

Continuous-length coil of Acme Silverstitch stitching wire

Cut Costs of Carton Assembly and Closure with ACME SILVERSTITCHER

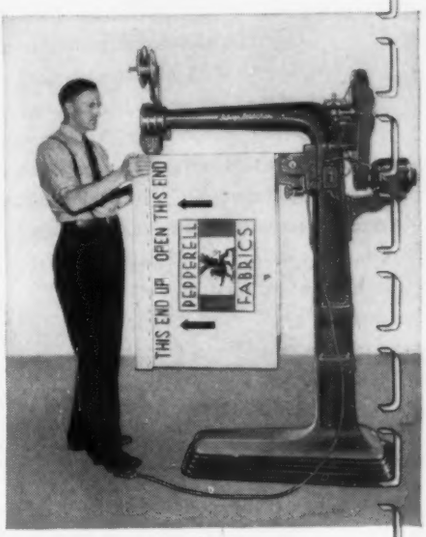
You get a four-way saving when you use wire stitching and Acme methods. Here's how . . .

1 *Save on time*
Acme Silverstitchers prepare fiberboard boxes for shipment in record time. Boxes can move on production-line basis, built as needed.

2 *Save on materials*
Acme Silverstitch wire helps eliminate sizeable amounts of more costly boxing materials.

3 *Save on man hours*
The Acme method assembles more boxes per man hour than other ways.

4 *Save on shipping costs*
Use of stitched fiber boxes and Acme's "strap that box, ship it as a bale" method cuts shipping costs.



Textile carton being stitched with Acme Silverstitcher . . . quickly, economically, securely.

Find out today how we can help you get these savings. Call an Acme Shipping Specialist, or mail the coupon for more information.

STITCHING WIRE DIVISION
ACME STEEL COMPANY
NEW YORK 17 ATLANTA CHICAGO 8 LOS ANGELES 11

ACME STEEL COMPANY, Dept. TI-69
2838 Archer Avenue, Chicago 8, Illinois
☐ Send booklet on packaging textiles for shipment.
☐ Have representative call.

Name_____

Company_____

Address_____

City_____ Zone_____ State_____

CUT COSTS
INCREASE EFFICIENCY
STEP UP PRODUCTION

with sheet metal parts of
PROVEN QUALITY

Made and delivered with
DEPENDABLE SERVICE

Production profits from beginning to end are yours—*if* your preparatory machinery is geared for efficient, economical volume production. One of the South's oldest and most experienced sheet metal plants is prepared to help you do just that. Through the years this organization has earned a reputation for top quality products, painstaking workmanship and reliable service. You will find that this kind of special knowledge and experience applied to your maintenance problems will make an important contribution to continuous, profitable production.

GASTONIA TEXTILE SHEET METAL WORKS, INC.
GASTONIA, NORTH CAROLINA
A SHEET METAL WORKS SERVING TEXTILE MILLS

Maguire
Service
to
MANUFACTURERS
DISTRIBUTORS
SELLING AGENTS

Eliminates *credit losses;* makes *CASH* available as shipments are made; makes possible increased sales volume, without increased fixed invested capital.

Faster and greater turnover should yield increased profits without credit risks.

Write today for details.

John P. Maguire
& Company
INCORPORATED

FACTORS
370 FOURTH AVENUE
NEW YORK 10, N. Y.

Check Credits
Cash Sales
Absorb Credit Losses

Corp. has work underway on a boiler house at the mill in North Seekonk, Mass., reported to cost about $25,000.

Aponaug Mfg. Co., cotton yarns, etc., has suspended operations at No. 2 mill in West Point, Miss., for an indefinite period.

Cheshire Mills, Inc., Harrisville, N. H., flannels and woolens, has work underway on improvements in certain divisions of the mill, and new equipment will be installed.

Church Street Printing & Finishing Corp., New York, N. Y., has been organized with a capital of 200 shares of stock, no par value, to operate a textile printing and finishing plant.

Burlington Mills Corp., Greensboro, N. C., has let general contract for one-story addition to the Piedmont Heights Mill, Burlington, N. C., to be equipped for the manufacture of decorative fabrics, a portion of the unit to be used for warehouse service. The cost is reported to be about $300,000, with equipment.

Dora Yarn Mill Co., Cherryville, N. C., has let general contract for a one-story addition.

Guerin Mills, Inc., Woonsocket, R. I., woolen and worsted goods, has plans for the construction of a branch mill, comprising several large buildings, at Ramseur, N. C. The initial unit will be equipped for the spinning division.

Quaker Maid Mills, Inc., Philadelphia, Pa., cotton loop-pile rugs, has completed an addition to the mill to be used for the dyeing, finishing and latexing departments. A new division will be installed for processing special rugs made to individual orders.

Barrington Fabrics, Inc., West Warwick, R. I., has been chartered with a capital of 300 shares of stock, no par value, to manufacture rayon fabrics. Alfred R. Stokes, West Barrington, R. I., is the principal incorporator and representative.

Rock Hill (S. C.) Printing & Finishing Co. has work underway on extensions and improvements in the power plant at the mill. A turbine generator, boiler and auxiliary equipment will be installed. The project is reported to cost about $1,000,000.

The Springs Cotton Mills, Lancaster, S. C., has placed an order to Draper Corporation, Hopedale, Mass., for 14,000 new looms, reported to be a record order. The order specifies

This Fork Truck
Does MORE WORK
FOR LESS "PAY" *because it has*
DYNATORK *Drive*

Available only in CLARK'S gasoline-powered Utilitruc, *Dynatork Drive* eliminates the clutch and conventional transmission. Nothing comparable in the fork-lift-truck field. Benefits so numerous that the important question is: *Can you afford to be without it?*

To help get the answer—to enjoy unsurpassed counsel on any materials-handling matters —CONSULT CLARK. Please direct inquiries on your business letterhead to address listed below.

CLARK ELECTRIC AND GAS POWERED FORK TRUCKS
AND INDUSTRIAL TOWING TRACTORS

INDUSTRIAL TRUCK DIV., CLARK EQUIPMENT COMPANY BATTLE CREEK 61, MICH.
REPRESENTATIVES IN PRINCIPAL CITIES THROUGHOUT THE WORLD
AUTHORIZED CLARK INDUSTRIAL TRUCK PARTS AND SERVICE STATIONS IN STRATEGIC LOCATIONS

Are you competitive price wise?

Are you ready for a buyer's market?

Are you satisfied with your quality?

As Production Engineers we specialize in the utilization of

LABOR — EQUIPMENT — MATERIAL

Ask for our list of satisfied clients—It reads like the Blue Book of American Manufacture.

Our work covers millions of spindles and years of experience.

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in Charge of Southern Operations
30 CAMDEN ROAD
ATLANTA, GA.

10.000.000 CARDING POINTS NEED PERFECT GRINDING ROLLS

CONSULT THE CARD-GRINDING SPECIALISTS

DRONSFIELD'S

TRAVERSE WHEEL GRINDER Nº 120

SOLE AGENTS FOR DRONSFIELD'S MACHINERY :-
JOHN HETHERINGTON & SONS INC.
BOSTON · MASS.

SOLID GRINDING ROLLER Nº 112

DRONSFIELD BROTHERS LTD · OLDHAM · ENGLAND

X-2, XD and XL model looms.

A new durable finish for rayon marquisette has been developed by **Powdrell & Alexander, Inc.,** New York, N. Y., from American Cyanamid Company's "Sheerset" resins.

Malcolm P. Decker of Providence, R. I., has acquired the **General Finishing Corp.,** Assonet, Mass., formerly known as Crystal Springs Bleachery & Dyeing Co. Mr. Decker has plans to form a new corporation which will be known as **Assonet Finishing Co., Inc.**

Edwin E. Berliner & Co., New York, N. Y., converter of cottons and rayon, has been liquidated. Edwin E. Berliner, founder and head of that company, has been named to head the New York office of Glasgo Finishing Co.

The United States Rubber Co. has installed 12 new tire fabric looms in the Stark Mill, Hogansville, Ga., and henceforth will accept orders for fabric as well as cord.

Designs for a sewer system and sewage treatment plant have been completed for **Southern Bleachery and Print Works,** Taylors, S. C. The construction contract is reported to be $58,246.00.

Orr Mill has sold 240 of its houses in the mill village at Anderson, S. C.

The Williamston Mill of **Textron Southern, Inc.,** Anderson, S. C., has announced its intention of selling the houses in the mill village to mill employees.

Strahorn Wool Carding Co., Milwaukie, Ore., has been purchased from E. M. Jensen by E. Buhite who will continue to operate it.

The Ball Bank plant of **Mishawaka (Ind.) Rubber and Woolen Mfg. Co.** has been divested of its woolen manufacturing machinery and equipment. Only the knitting machinery has been retained and two new mills are being set up in southern Indiana with this machinery. P. A. Mohn, former superintendent at Mishawaka, purchased part of the machinery and has established the **Cambridge (Ind.) Woolen Mills.** The balance of the machinery was purchased by Millbridge Woolen Corp. of New York and been moved to Mathews, Ind., to be installed in a plant to be known as **Mathews Woolen Mills.**

Navaho Weaving Corp., New York, N. Y., rayon fabrics, has purchased part of the former property of **Es-**

for Softness . . . plus **BODY**

WHEN you want softness plus body in any textile, investigate STEARO GLYCERYL SULFATE N. It provides notable improvements in softening and plasticizing effects, and at the same time can give you body and/or thickness over a wide range due to its superior penetrating ability.

More readily soluble and more stable because of its higher SO_3 content, Stearo Glyceryl Sulfate N is also more resistant to hard water and electrolytes than conventional soaps and sulfonated tallows. It insures much greater resistance to yellowing and rancidity. It can be used with many other finishes to get a considerable variety of hands.

No changes in process or equipment are involved in using Stearo Glyceryl Sulfate N, and it is much more economical in use than ordinary sulfonated tallows.

Write for Onyx Technical Data Sheet 12-T *for data on Stearo Glyceryl Sulfate N and its use for softening; warp size lubrication; plasticizing starch; as a protective agent against alkali damage, etc.*

ONYX OIL & CHEMICAL COMPANY
JERSEY CITY 2, N. J.
CHICAGO • PROVIDENCE • CHARLOTTE • ATLANTA
In Canada: Onyx Oil & Chemical Co., Ltd., Montreal, Toronto, St. Johns, Que.
For Export: Onyx International, Jersey City 2, N. J.

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A NEW

SPRAY-APPLICATION TECHNIQUE

for

TEXTILE PROCESS COMPOUNDS

MINOTINTS

Oil-base fugitive tints for all synthetic and natural fibers.
Identification — Lubrication — Conditioning

RAYON OILS	SS BASE OIL
TINTINOLS	MINEROL
LYNOL	MEON

BRETON OILS FOR WOOL

Accurate trouble-free application of spraying oils and tints by the new pressure method which eliminates pumps and moving parts. Simplification is progress and ours is backed by 75 years' experience.

INQUIRIES INVITED

BORNE SCRYMSER COMPANY

Offices and Works
ELIZABETH, N. J.

Established 1874
75th Anniversary

Southern Warehouse
CHARLOTTE, N. C.

Broken Picks?

● The reduction of broken picks is one of the features of the Nash No. 79. Running quills through keeps them in perfect condition . . . assures clean, smooth quills at all times, free from sharp surface projections and burnished to a high, dry luster.

No harsh abrasive action is employed during the operation and the original finish coating of the quill remains intact. All dirt is removed from grooves and the resultant polish has a surface free from any deposit. Repeated polishing of quills through the Nash No. 79 will in no way damage the quills or reduce their life.

Write for complete descriptive literature.

We also manufacture Nash 88 and Nash 37 Automatic Refinishers for throwing bobbins.

NASH 79 AUTOMATIC QUILL POLISHER

For Refinishing Loom Bobbins

Write for complete descriptive literature

J. M. NASH COMPANY

2368 N. 30TH STREET, MILWAUKEE 10, WISCONSIN

SPECIAL FINISHING MACHINES · SINCE 1890 · NASH

mond (R. I.) Mills, consisting of a building and over 5 acres of land, previously known as No. 3 mill used for small blanket manufacture. The structure will be improved and equipped for a new weaving mill.

Frantex Corp., Pawtucket, R. I., has been chartered with a capital of 600 shares of stock, no par value, to manufacture rayon fabrics. Gerald A. Oster, Pawtucket, is the principal incorporator and representative.

Clinton (S. C.) Cotton Mills, Inc., print cloths and twills, has closed bids for the erection of an office building at the mill.

Kendall Mills, Walpole, Mass., have been awarded a safety award flag denoting an "outstanding accident prevention record" by the Liberty Mutual Insurance Co.

Erwin Cotton Mills Co., through Lockwood Greene Engineers, Inc., Spartanburg, S. C., has contracted for the construction of apparatus rooms for air conditioning equipment at Erwin's plants No. 1 and No. 4 at West Durham, N. C.

Due to the formation of the **Nashua-New Hampshire Foundation,** 2,060 of the 3,500 jobs eliminated by **Textron, Inc.,** decision to cease operations have been saved. Also, it is reported that prospects of help from additional firms to fill the job gap are "good."

Opp and Micolas Cotton Mills, Inc., Opp, Ala., has work in progress on a conditioning laboratory for testing bag materials, to be adjacent to the office building. The cost is reported as $25,000.

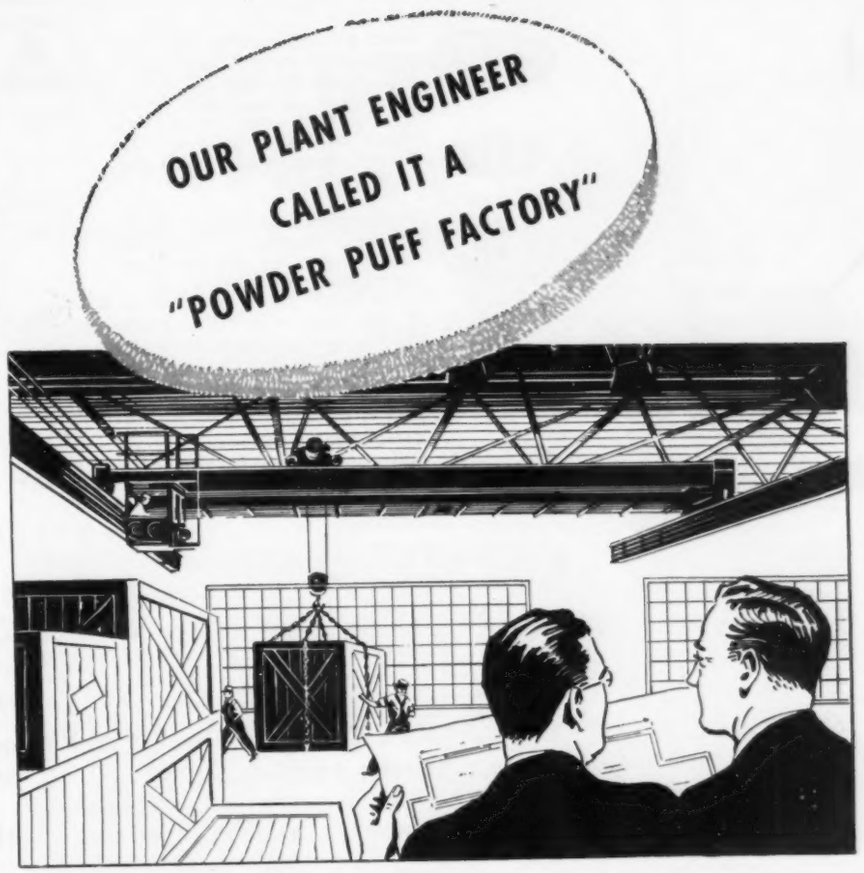
Anniston (Ala.) Manufacturing Co. has under construction additional office facilities.

Draper Prison's cotton mill in Montgomery, Ala., has ceased production due to the high expense to the State.

California Woolen Mills, Eureka, Calif., is a new concern expected to be in full production by the middle of this month. The company is a copartnership of Clyde F. Wagner and Victor Egan who formerly were superintendent and manager, respectively, of the Humbolt Bay Woolen Mills, Eureka.

Merchant Rug Co., Oakland, Calif., was recently purchased by S. Martin Kludjian.

Berkley (Calif.) Rug Works, has been acquired by G. C. Chapman and is now in full production manufacturing rag rugs. The company also does commission dyeing.



"We liked the location and the size, but when we figured on increasing crane capacity, the structure just wouldn't take it. Our plant man finally gave up in disgust saying, 'They must have built this shop for a powder puff factory.' "

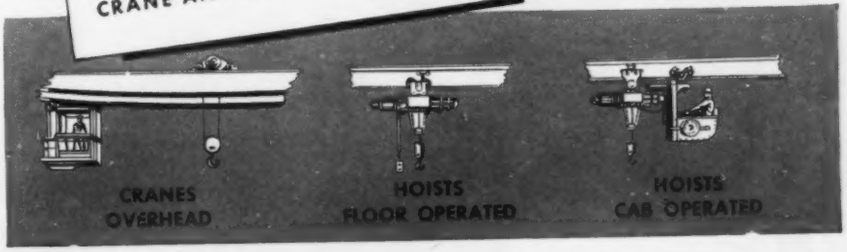
"When we decided to build, you can bet we planned *in advance* against the possibility of a future need for greater crane capacity."

"The Shepard Niles specialist was a great help in this planning. He seemed to know just about what loads were maximum in different types of industry. We were guided, to a great extent, by his suggestions."

The time to plan for most economical materials handling is before the building is built or the remodeling completed. Ask the Shepard Niles specialist to sit in—he has lots of experience behind him—and his sales interest is not concentrated on any one type of lifting tool.

SHEPARD NILES
CRANE AND HOIST CORPORATION

Makes and sells all three lifting tools for airborne shop loads.



465 SCHUYLER AVENUE • MONTOUR FALLS, N. Y.

RODA — High grade gas, by-product and steam coal from Wise County, Va., on the Interstate Railroad.

DENDRON — High grade gas, by-product, steam and domestic coal from Wise County, Va., on the Interstate Railroad.

STONEGA — High grade, high volatile steam and by-product coal from Wise County, Va., on the Interstate Railroad.

PREMIX — A laboratory controlled product blended to meet exacting stoker requirements. From Wise County, Va., on the Interstate Railroad.

GLENBROOK — The Premium Kentucky High Splint unmatched for domestic use. Produced in Harlan County, Kentucky, on the L. & N. Railroad.

COKE — Roda and Stonega from Wise County, Va.

CRITERION COAL — High grade gas, by-product, steam and domestic coal—Pittsburgh seam from Irwin Basin, Westmoreland County, Pennsylvania, on the Penna. Railroad.

CROZER — Genuine Pocahontas from McDowell County, W. Va., on the Norfolk & Western Railroad.

LYNCO — High fusion coking coal for by-product, industrial stoker and pulverizer use from Wyoming Co., W. Va., on the Vgn. Ry.

Old Kentucky — Hazard No. 4 and No. 7 steam and domestic coal from Wiscoal, Knott County, Kentucky, on the L. & N. Railroad.

ANTHRACITE — Hazle Brook and Raven Run Premium Coal.

Our personnel with the experience gained through long and varied marketing activity assures effective servicing of any fuel requirement.

General Coal Company

123 SOUTH BROAD STREET — PHILADELPHIA 9, PA.

Branches:

BLUEFIELD, W. VA. — BOSTON — NEW YORK — BUFFALO — NORFOLK — CHARLOTTE, N. C. — PITTSBURGH — CINCINNATI

SUPPLIERS' NEWS

WHAT THEY ARE DOING

Henry H. Hersey, who has served the textile field since 1916, has been chosen district sales representative to handle **Eriez Manufacturing Company's** line in South Carolina and the southern half of North Carolina. B. A. Pietri has been appointed

Hersey **Pietri** **McKerrall**

district sales representative covering Virginia and the northern half of North Carolina. S. G. McKerrall is the new district sales representative in Alabama.

G. Webber Knight has been chosen to head the recently opened Washington, D. C., offices of the **McPherson Company,** Greenville, S. C., architects and engineers.

M. H. Cranford, former service engineer, has been made southern manager for the **Sterling Ring Traveler Co.,** Fall River, Mass.

C. R. Daniels, Inc., Daniels, Md., has completed the construction of a one-story basket assembly plant to meet the demand for more Glosstex, basket fabric.

The **Calco Chemical Division, American Cyanamid Co.,** Bound Brook, N. J., has made known the consolidation of research, process development and dyes technical service into a single department to be known as the Research and Development department.

Cochrane Corp., Philadelphia, Pa., has acquired substantially all of the capital stock of Liquid Conditioning Corp., Linden, N. J., and will operate as a wholly owned subsidiary hereafter. The products of the Liquid company will continue to be marketed under the trade name "Liquon."

E. H. Isenhour, southern agent for

"CARRYING" ..is part of school-day romance ..but it costs you money in manufacturing

"CARRYING" commodities to and from production, assembly, processing or packaging lines costs too much. It's a waste of time and manpower.

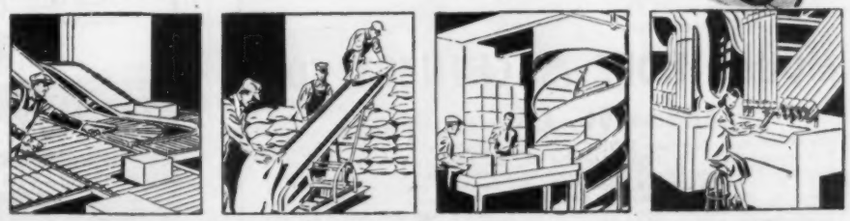
Put conveyors to work "carrying" — packages, parts, units — loose or in containers — up, down, or acrossthrough manufacturing or processing to storage or shipping. Speed handling operations—save time and costs.

The range, versatility, and flexibility of Standard Conveyors have been developed in more than 40 years of service to businesss and industry. See Standard for any conveyor need.

STANDARD CONVEYOR COMPANY

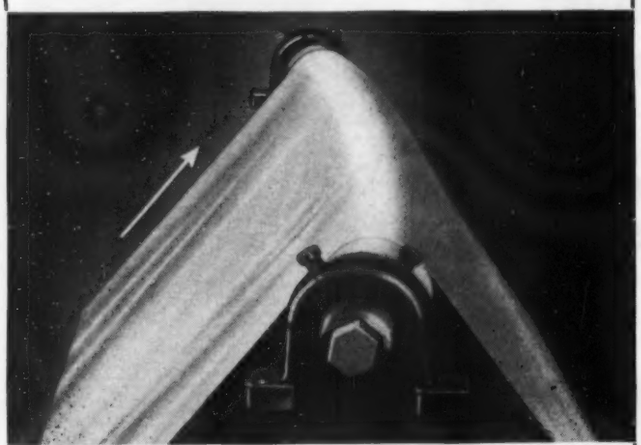
General Offices: North St. Paul 9, Minnesota
Sales and Service in Principal Cities

Send for Standard's General Catalog — see how conveyors are used to best advantage in every field of industry. Ask for Bulletin No. C-69.



ROLLER - BELT - SLAT - CHAIN CONVEYORS • PORTABLE CONVEYORS AND PILERS • SPIRAL CHUTES • PNEUMATIC TUBE SYSTEMS

You Obtain Widthwise Expansion
ON ALL FABRICS OR FILMS
with . . .



Mount Hope **Free-Wheeling EXPANDER**

The Mount Hope Free-Wheeling Expander is regularly used to expand widthwise all types of fabrics, including rayon marquisette, and rayon and cotton tire cord, in conjunction with —

CALENDERS • CONTINUOUS DYEING MACHINES • DRY CANS • MERCERIZING MACHINES • WATER MANGLES • QUETCHES OPEN SOAPERS • TENTER FRAMES • STARCH MANGLES • DYE PADS — and in front of nip rolls everywhere in the mill.

Its advantages are as follows:—

1. Because the warp is subjected to minimum tension less bow than usual is required, resulting in extra long life for the Neoprene surface of the expander.
2. Expanders may be set at any desired angle to the cloth to adjust the amount of widthwise stretch produced.
3. Ball bearings, grease packed, are securely mounted in steel spools to outlast many Neoprene sleeve coverings, and so designed that they cannot stick nor turn on the axle and cut it.
4. Sealed ends are furnished for wet service to protect bearings.

Write for bulletin ECI

MOUNT HOPE MACHINERY CO.
42 Adams St., Taunton, Mass.

Representatives—Parkman Collins Company, Boston—for Maine • Ingalls Engineering Company, Providence—for N. H., Mass., R. I., and Conn. • John H. Andreson, Inc., Paterson—for Southeastern N. Y., N. J., and Pa. • A. B. Julin, Watertown, New York—for Northern and Western N. Y. • Slaughter Machinery Company, Charlotte—for the South • S. S. Wilson, 1737 Howard St., Chicago—for Mid-West • Sidney Springer, Los Angeles—for California • W. J. Westaway, Ltd., Hamilton and Montreal—for Canada.

Reinforced
"Verybest"
LUG STRAPS

"REINFORCED"

—means more material for longer wear because EXTRA material is built in at each of the three wear and stress points . . . in both the short and long lug strap. The only Reinforced Lug Straps.

Additional Stocks at:
399 Lofton Rd., N.W.
Atlanta, Georgia
and
1602 Cedar Springs
Dallas, Texas

THE BULLARD CLARK COMPANY

JACOBS

SOUTHERN DIVISION
Charlotte, N. C.

NORTHERN DIVISION
Danielson, Conn.

Ashworth Bros., Inc., Charlotte, N. C., has retired from active service. Mr. Isenhour has been suceeded by John M. Reed, former sales and service representative. J. E. Seacord, Jr., has replaced R. B. Wilson, retired, and will do sales and service work throughout the Georgia, Alabama, and Tennessee territories. T. F. Hart, former service representative and card clothier, has been promoted to the sales and service force, covering the North Carolina area for Ashworth. A. D. Ennis has been promoted to the service department to be in charge of card inspection work. A. E. Johnston, Jr., is now plant manager in charge of operations in the new manufacturing plant in Greenville, S. C., and is also responsible for sales and service in South Carolina.

Palmer J. Lathrop, associated with the **Cameron Machine Co.,** Brooklyn, N. Y., since September, 1948, and

Mr. Lathrop

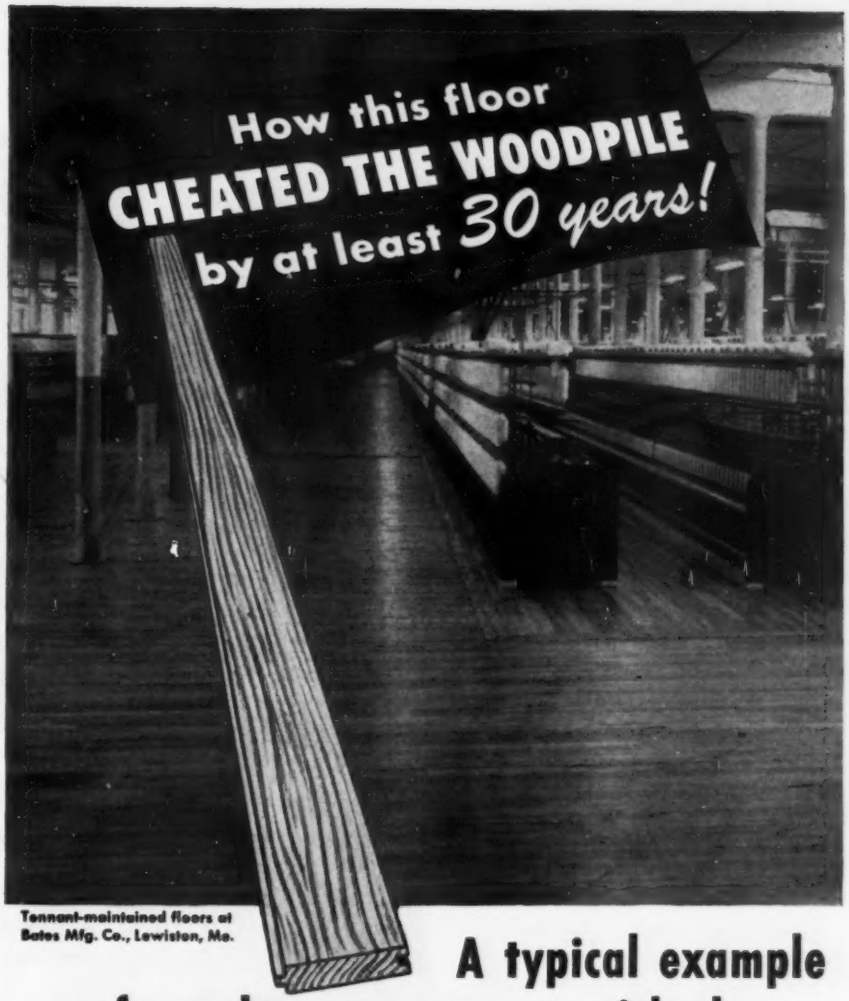
formerly vice-president in charge of production for the Bristol-Myers Co., has been elected executive vice-president of Cameron.

Richard E. Hudson, Jr., formerly a research and development engineer with West Point Manufacturing Co., has been appointed head of the textiles section of the Applied Chemistry division of **Southern Research Institute,** Birmingham, Ala.

George B. Beitzel, former vice-president, has been elected president of **Pennsylvania Salt Mfg. Co.,** Philadelphia, Pa. He succeeds Leonard T. Beale who is now chairman of the board. William P. Drake was made vice-president in charge of sales, and William F. Mitchell, vice-president in charge of manufacturing.

The Hemphill Co., Pawtucket, R. I. has announced the retirement of Alfred L. Hutton, Jr., from the presidency of that firm.

General Electric Co. has plans to



Tennant-maintained floors at Bates Mfg. Co., Lewiston, Me.

A typical example of results you can get with the...

TENNANT FLOOR MAINTENANCE SYSTEM

Transformed like magic, this 30-year-old floor —once dark, rough and spongy from scrubbing—is now good for another 30 years. Saved from costly, premature replacement, it's been made bright, smooth and durable again—by low-cost reconditioning with the TENNANT System.

RECONDITIONS your floors. Gets rid of dark, rough, oil-soaked fibers . . . provides a smooth, bright, new-wood surface.

HARDENS floor surface by special sealing process . . . fills, binds and toughens fibers to resist dirt penetration.

DRY CLEANS; ends scrubbing! Avoids muss, saves manhours, reduces accidents . . . assures cleaner floors at LESS COST!

YOUR FLOORS STAY CLEAN longer when dry-cleaned instead of scrubbed! With this Tennant Floor Machine, dirt, grime and traffic stains are whisked off and picked up in 1 operation. Leaves smooth, hard, dirt-resistant surface . . . only daily care needed is fast, easy sweeping with dry cotton mop. No muss; easy to use; keeps floors looking like new.

- **Reduces floor cleaning costs.**
- **Makes floors easy to clean.**
- **Prolongs floor life, aids safety.**

G. H. TENNANT CO.
2585 North 2nd Street
Minneapolis 11, Minnesota

Write today! Ask for "New Floors From Old" article; also "Textile Floor Maintenance" bulletin, etc.

TENNANT FLOOR MAINTENANCE System
Established 1870
OFFICES IN PRINCIPAL CITIES

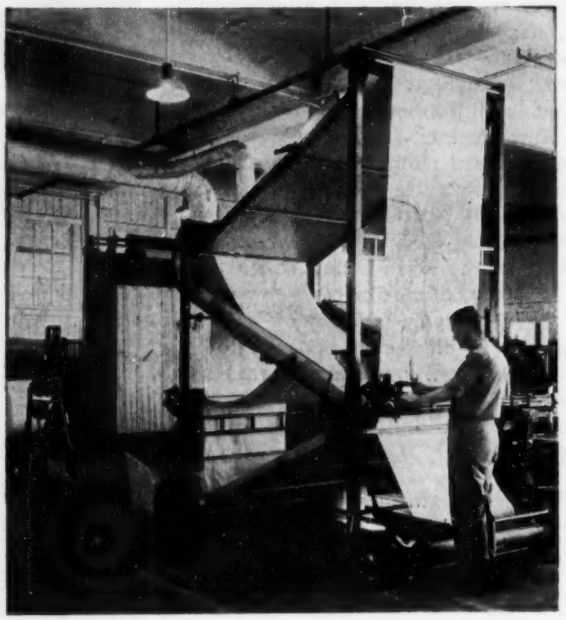
MAYBE YOU ARE *Missing Something*

Many other companies (similar to yours), have made it possible for their employees and families to have the satisfaction of knowing that most of their personal expense of hospital confinement, surgery and death will be taken care of under Protective Life's Group Plan.

Without obligation, let us give you details and the names of some of the employers who (at no expense to themselves) are experiencing the advantage of the Protective Life Plan.

PROTECTIVE LIFE
INSURANCE COMPANY
WILLIAM J. RUSHTON, President
BIRMINGHAM, ALABAMA

THIS ONE MAN CAN



CLEAN 288,000 YARDS OF CLOTH PER WEEK

Efficient Hermas Clothroom Machines are helping many efficient mills to meet the high-cost-of-production situation.

•

HERMAS AV SHEAR

removed all hanging threads from both sides of the cloth *at speeds up to 120 yards a minute* in one run through.

•

The speeds of Hermas brushes, sewing and rolling machines, and other equipment are synchronized to make such production speeds continuous and practical.

•

Send for facts about the clothroom equipment you need for economical operation.

HERMAS MACHINE COMPANY

America's Only Specialists in Clothroom Equipment

Warburton Ave. Hawthorne, N. J.

REPRESENTATIVES

Carolina Specialty Company
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Robert H. Kelley
84 Union Street
Milford, N. H.

EXPORT DIVISION
Francis H. Love
57 William St., New York City

Robert R. Simpson
498—12th Avenue
Paterson, N. J.

establish a new apparatus service shop and warehouse in Richmond, Va.

Paul J. Doyle, Jr., formerly in charge of the Houston office of **Carbide and Carbon Chemicals Corp.** has been appointed district manager for the entire Texas area.

Stein, Hall & Co., Inc., New York, N. Y., has announced the following: Frank W. Perry, former manager of the textile sales department in New York, is now manager of the Char-

Mr. Nuttall

Mr. Perry

lotte, N. C., office; Norman H. Nuttall, formerly devoting his time to laboratory problems and also active on the sales staff, replaces Mr. Perry in the New York office.

The **Atlantic Fire Equipment Manufacturing Co.** of Atlanta, Ga., has been appointed factory distributor for the **All-Out Manufacturing Corp.,** New York, N. Y., manufacturers of dry chemical fire extinguishers. The All-Out extinguisher, available in two sizes (15 lb and 10 lb), has been approved by Factory Mutual and Underwriters Laboratories.

John B. Trotter, former asssitant branch manager in charge of the Charlotte, N. C., office, has become assistant general branch manager of the Birmingham, Ala., sales district of **Monsanto Chemical Company,** St. Louis, Mo.

The Baker Industrial Truck Division of **The Baker-Raulang Co.** has moved its general offices, including the purchasing, sales, engineering and service departments, to a new location in Cleveland, Ohio.

Bernhard G. Zimmerman has announced the establishment of **Zimmerman Associates,** research laboratories and a plant for manufacturing fine organic chemicals, at Guilford College, N. C.

E. F. Houghton & Co. has moved

. . . used for quality control, development and testing of products and processes

In the modern, new laboratory recently constructed by the Riegel Textile Corp., Atlas Launder-Ometers and Fade-Ometers make constant quality control possible by providing accurate washing and color fastness data on samples of fabrics being run through production lines.

As part of the research program inaugurated by Riegel officials, these Atlas-Ometers help also to provide complete information on each new fabric while it is still in the developmental stage as well as to maintain the high standard of quality in daily production. In this manner, Riegel avoids costly trial and error methods still practiced in some textile plants today.

Technicians at this laboratory conduct washing tests of the A. A. T. C. C. in the Launder-Ometer to determine the fabric's resistance to shrinking, its color fastness, and resistance to washing and mechanical action. The Fade-Ometer is used to obtain factual data regarding the degree of fading registered on the sample by sunlight, temperature, and humidity. The Atlas cycle timer unit can be set to duplicate any test at any time.

New research model Launder-Ometers with capacities ranging from 20 pint jars to 6 half-gallon containers are now available as part of the complete line of standard Launder-Ometers.

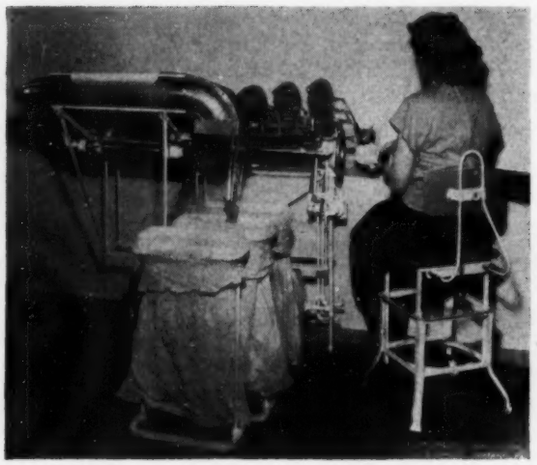
ATLAS ELECTRIC DEVICES COMPANY

361 W. Superior St., Chicago 10, Ill.

long stockings WRINKLE
short stockings TEAR
AVOID
WHILE REDUCING COSTS!

HOSIERY LENGTH SEPARATION

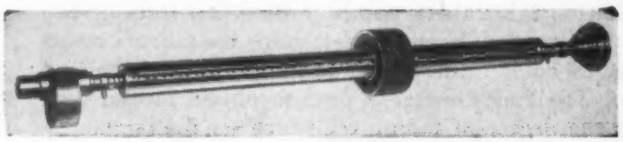
inspecting operation
TURNS, SEPARATES, BAGS and COUNTS
according to length!



Contact
EDWARD R. AMMON, INC.
READING, PENNA.

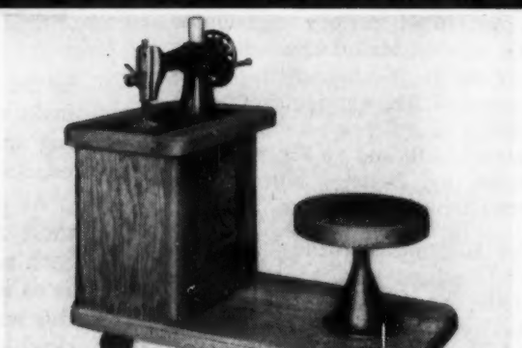
How you can lengthen the life of your Card Grinders

Our service engineers — card grinding specialists — are always at your service. They will go to your plant to work out your card grinding problems and check your machinery. They will give you constructive information on grinding bare cylinders or card wire.



B. S. ROY & SON COMPANY
Established 1868
Worcester, Mass. — Charlotte, N. C.
Sales Engineers in the South:
Charles E. Hendrick—L. P. Bell—B. L. Quick
Office and plant, 1623 North Tryon Street, Route 29
Charlotte, N. C.—Tel. 5-3845.

"Standard" PORTABLE STYLE No. 1530 TAPE SEWING MACHINE



New portable Tape Sewing Machine for sewing Spinning and Twister tapes. Adapted to many other uses. Produces lock stitch and has accurate stitch adjuster. Also has REVERSE MOTION and self-releasing bobbin winder. Hand operated • Compact for small space operation • Adjustable seat • Swivel casters.

For complete details — write for descriptive folder.

STAMILCO — SERVICE QUALITY HONESTY RELIANCE ESTB. 1890

STANDARD MILL SUPPLY CO.
1064 Main St. Pawtucket, R. I.
6708 Empire State Bldg. New York, N. Y.
SOUTHERN STANDARD MILL SUPPLY CO.
Charlotte, N. C.

its Charlotte, N. C., office to 825 W. Morehead St. from 1301 W. Morehead St. Paul J. Welsh, formerly on the development staff of B. F. Goodrich Co., Akron, Ohio, has joined the research staff of the Houghton Company. A new product development department has been established in Philadelphia, Pa., by Houghton, also. Dr. H. B. Walker, former assistant to the vice-president in charge of operations, has been named manager of the new department.

Nopco Chemical Co., Harrison, N. J., has announced the election of Thomas A. Printon, former vice-president, as president succeeding Charles P. Gulick. Mr. Gulick will continue as chairman of the board.

Mr. Printon

Meese, Inc., Madison, Ind., manufacturers of Shamrock canvas basket, Shamrock insulated shipping containers and allied products, has announced the establishment of a district sales office in Detroit, Mich., to be under the management of R. M. McGuire and Associates. John T. McKeon, formerly connected with the W. T. Lane Co., has joined the sales force of Meese, Inc., working out of Madison.

F. R. Lowe, former selling agent in the Charlotte, N. C., area, has replaced the late Walter W. Gayle as southern agent in charge of sales for **Saco-Lowell Shops.**

Earl W. Bennett, chairman of the finance committee, has been elected chairman of the board of directors of **Dow Chemical Co.,** Midland, Mich. Leland I. Doan has been chosen president and chairman of the executive committee.

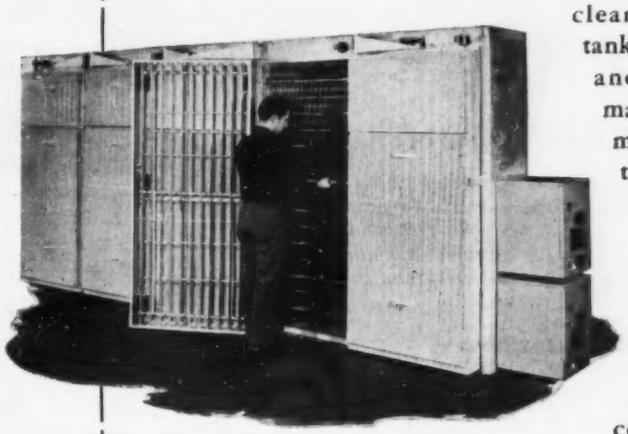
Interchemical Corporation, Fair Lawn, N. J., has made plans for the construction of a one-story plant in Hawthorne, N. J., to house the operations of the company's Textile Colors division. Operations for the

SUPER-CLEAN AIR
with simplified maintenance

ELECTRO-CELL KEEPS DUST AND SMOKE OUT AND OPERATING COSTS DOWN

YOU get super-clean air at a saving with the installation of an AAF Electro-Cell. This modern electronic precipitator gives positive protection against dust and soot—even down to such fractional micron sizes that its true efficiency can only be evaluated by the Discoloration Method of testing.

Removable collector plate cells permit selection of the maintenance method best suited to your operation. Cells may be manually washed and re-oiled in place; removed for easy cleaning in a special tank, or washed, dried and recoated automatically with minimum interruption to operation.



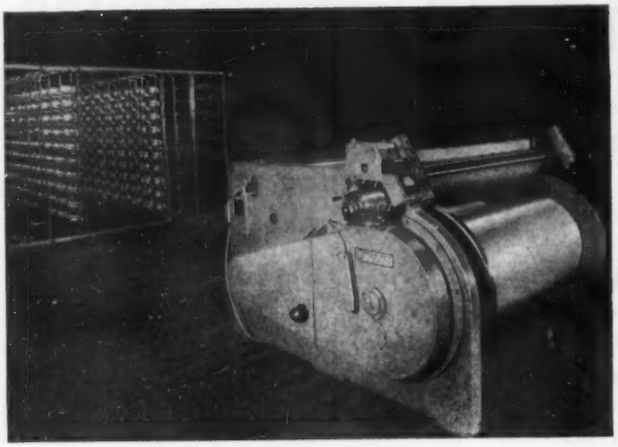
The Electro-Cell's sectional construction reduces weight of parts, eliminates multiplicity of electrical connections, protects wiring from dirt and water. And its full-height hinged or removable ionizers minimize electrical losses, reduce ozone and simplify replacement of ionizing wires.

If you want positive protection against soot and dust plus proven savings in operation and maintenance, get complete Electro-Cell data now. Just contact your local AAF representative or write direct for Bulletin No. 252.

AMERICAN AIR FILTER COMPANY, INC.
275 Central Avenue, Louisville 8, Kentucky
In Canada: Darling Bros., Ltd. Montreal, P. Q.

AAF
AIR FILTERS
AND DUST CONTROL EQUIPMENT

A New



SIPP-EASTWOOD

HIGH SPEED WARPER

ELECTRONICALLY CONTROLLED

Here is a powerful new warper, so heavily constructed as to be practically vibrationless when in operation. It can run at yarn speeds of 150 and 900 yards per minute, and builds beams up to 36 inches in diameter, 54¼ inches or wider between heads, AC-DC drive.

Outstanding Features Include:

1) Static eliminator.
2) Electric control of warp speed.
3) Electric indication of speed at all times.
4) Pushbutton controls throughout.
5) Motor mounted magnetic brake.
6) Magnetically operated beam brakes for auxiliary braking of the beam, measuring roll and pressure roll, and to hold the beam at a standstill.

A separate hydraulic system is provided for handling of beams in and out of the warper.

Write for full description of this new warper.

ITS A SIPP EASTWOOD TRADE MARK

SIPP-EASTWOOD CORPORATION

45 Keen Street **Paterson, New Jersey**

DOMESTIC AGENTS:

S. FRED TOLL
2128 Green St.
Charlotte 1, N. C.

J. S. FALLOW & CO.
New Bedford, Mass.

KALPINOL

for NYLON HOSIERY

Yarns wet with Kalpinol give a good stitch, then dry within two inches of the needles. Stitch remains set, birdseyes or slipping of the stitch are avoided. Rolling is prevented, making seaming easier.

. . . a Kali lubricant that reduces friction on the needles and sinkers and also makes carrier tubes last longer.

For cleaning nylon size from your needles, sinkers, bits, etc., use K.N.K. (Kali Needle Kleaner). It can be used straight, or mixed with equal parts of water without separating.

ONE OF A FULL LINE OF KALI TEXTILE CHEMICALS

KALI MANUFACTURING CO.

Manufacturing Chemists

427 MOYER STREET • PHILADELPHIA 25, PA.

Specify

AMERICAN

For Knitting or Weaving

*AMERICAN DURENE**

Highest Quality Mercerized Yarns

NATURAL YARNS

Combed Peeler or Sak, 10's—90's Single
Combed Peeler or Sak, 10's—100's Ply

Selling Agents for

Efird Manufacturing Company

Knitting Yarns

Combed, 14's—60's **Carded, 8's—30's**

Thread Division • Lawrenceburg, Kentucky

W. H. SUTTENFIELD, Vice-President and Sales Manager

MOUNT HOLLY, N. C.	CHATTANOOGA, TENN.	PHILADELPHIA, PA.	CHICAGO, ILLINOIS	NEW YORK, N. Y.
Mr. C. E. Wood	Mr. H. W. Davenport	Mr. Wm. S. Montgomery	Wood & Hutchinson	Mr. M. L. Rixon
Miss E. R. Abernethy	735 Chestnut Street	3701 N. Broad St.	222 W. Adams St.	Room 2806
Mr. T. J. Davis				Empire State Bldg.

HIGH POINT, N. C., Mr. E. J. Holbrook
GASTONIA, N. C., Mr. T. C. Smotherman

American Yarn & Processing Company

Mount Holly North Carolina

most part presently conducted at Fair Lawn and two locations at Paterson, N. J., will be transferred to the new plant.

Richard W. Berg, former district engineer in the Pittsburgh territory, has been appointed district manager of the Pittsburgh office of **The Torrington (Conn.) Co.** The Torrington Company's Chicago office has been moved from 176 West Adams St. to 4352 West Roosevelt Road.

Lester Klempner, former field manager of the mid-western division with headquarters in Chicago, Ill., has been promoted to sales manager of the New York division of **National Starch Products, Inc.**

Whitin Machine Works, Whitinsville, Mass., have adopted spindle bolsters manufactured by SKF Industries, Inc., as standard equipment on all spinning frame units for which anti-friction bearings are specified.

Carl M. Chalmers, at one time associated with Draper Corporation, has joined **Texize Chemicals, Inc.,** as a representative in the textile division servicing mills in the southeast.

The appointment of the **Blackman and Uhler Co.,** Spartanburg, S. C., to represent **Hilton-Davis Chemical Co.,** Cincinnati, Ohio, in the southern textile field has been announced.

William M. Brennen, former sales manager of C. M. Deland, woolens, has been selected to promote sales of textile resins in the New York City area for **American Cyanamid Company's** Textile Resin department.

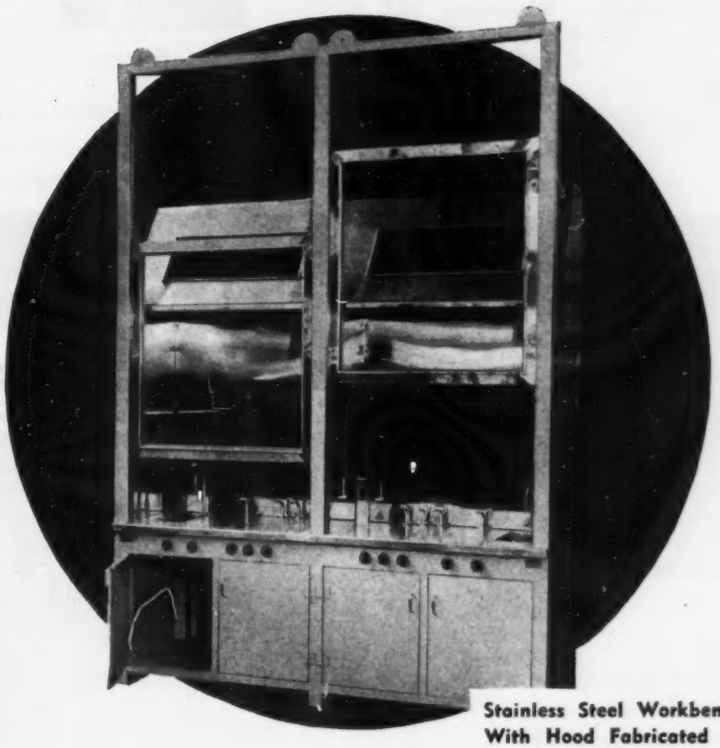
Sockwell Company, Atlanta, Ga., has been appointed authorized air conditioning distributor for the Atlanta area by **Westinghouse Electric & Mfg. Co.**

H. Horace Otway, at one time sales manager of the men's and boys' clothing division of Talon, Inc., has joined **The William Carter Co.,** Needham Heights, Mass., as assistant sales manager. He replaces Don MacKeracher who is now assistant manager of the company's New York sales office.

Lockwood Greene Engineers, Inc., has announced the election of Samuel B. Lincoln as president succeeding Chester S. Allen, now chairman of the board.

Peter D. Cooper, vice-president of **Celanese Corp. of America** and man-

SAVE YOUR PRODUCT WITH *Stainless Steel*



Stainless Steel Workbench With Hood Fabricated by Truitt on Special Order

Where your product comes in contact with metal . . . be sure you specify *Stainless Steel.* Correctly specified and fabricated, stainless steel overcomes many product difficulties. With non-corrosive Stainless . . . colors run true in successive runs and sensitive dyes remain unaffected by metallic contamination. Reduced repair and maintenance costs and longer life repay initial costs quickly.

In addition to stainless steel . . . *Truitt* fabricates most anything in carbon steel of any size and capacity. Engineering services are available without cost. Write today for booklet on *Truitt's* facilities.

Fuel Tanks — Vats
Stainless and Carbon Steel Fabrications

TRUITT
MANUFACTURING COMPANY
• GREENSBORO, NORTH CAROLINA •

ager of the acetate rayon yarn plant near Narrows, Va., has been transferred to the New York executive offices to assume new duties. Samuel A. Mansfield has succeeded Mr. Cooper in Narrows, Va.

Ralph M. Briggs, Jr., has succeeded W. D. Clark, Jr., resigned, as service engineer for the Georgia-Alabama - Tennessee - Mississippi and Louisiana territory of **The Bullard Clark Co.**, Charlotte, N. C., and Danielson, Conn. Mr. Briggs will make his headquarters in Atlanta.

Dr. Newton

Dr. J. M. Newton, research supervisor for **Clinton (Iowa) Industries, Inc.**, has been made director of the technical sales service department, supervising basic and applied research.

Donald J. Eccleston, former assistant general manager of the Glasgo (Conn.) Finishing Co., has joined the **Warwick Chemical Co.**, division of Sun Chemical Corp., Long Island City, N. Y., as sales manager of their Suntone pigment colors for printing and dyeing.

Mason-Neilan Regulator Co., Boston, Mass., has announced that its new demonstrator is on tour, beginning with the Central Atlantic states and proceeding through the southern, southwestern and Pacific Coast states.

Marshall R. Snyder Co., Charlotte, N. C., is handling the following accounts as sales representative: Reeves Pulley Co., Columbus, Ind.; Piott Foundry Co., Chicago, Ill.; Union Chain Co., Sandusky, Ohio; Winfield H. Smith Co., Springville, N. Y.; and Hilliard Corp., Elmira, N. Y.

The American Polymer Corp., Peabody, Mass., has installed new high-pressure polymerization units, making possible large volume production of a synthetic latex, known as Polyco 350.

Changes in the organization of **Owens-Corning Fiberglas Corp.**, Toledo, Ohio, are as follows: A general products division in Toledo and a textile products division in the Fiberglas Building, New York, N. Y., have been established; W. P. Zimmerman, executive vice-president of Fiberglas, has been given the additional duties of general manager of the general products division; J. H. Thomas, vice-president, was appointed general manager of the textile division; in addition, the former eight sales sections of the Fiberglas sales programs have been re-grouped.

Dr. Willard D. Peterson, former associate director of research and development at J. T. Baker Chemical Co., has become associated with **Arthur D. Little, Inc.**, Cambridge, Mass., a consulting research and engineering organization.

William Iselin & Co., Inc., New York, N. Y., has made known the appointments of Walter E. Krause, former new business representative in Pennsylvania, as assistant secretary;

DARNELL
CASTERS & WHEELS
Free Darnell Manual
Choose just the right caster or wheel for your needs from the Darnell line of nearly 4000 types. These precision made casters and wheels will help you speed up production . . .
DARNELL CORP. LTD. Long Beach 4, Calif.
60 Walker St., New York 13, N. Y.
36 N. Clinton, Chicago 6, Ill.

and Richard S. Perry, as assistant treasurer in addition to his present capacity as senior loan administrator. Mr. Krause is succeeded by Arnold Moore.

Alfred I. Stuart, formerly associated with Western Electric Co., has been appointed head of the methods engineering department of the **Hyster Company,** Portland, Ore.

The United States Testing Co., Inc., Hoboken, N. J., has announced the opening of a new Radioactive Isotope laboratory, to be under the direction of Dr. T. S. Taylor and supervised by J. J. Pescatore.

J. J. McSunas, Jr., has been made merchandiser of household fabric finishes for **S. C. Johnson & Son, Inc.,** Racine, Wis. Mr. McSunas will develop the selling and merchandising plans for Drax and a new Johnson fabric finish now being test-marketed.

Newly improved grades of tapioca, potato and corn dextrines are now being offered by **Morningstar, Nicol, Inc.,** New York, N. Y., in standard and custom blends.

R. B. Putnam has been chosen to occupy the newly-created position of general sales manager for **American Lumber & Treating Co.,** Chicago, Ill., in addition to his present duties as advertising manager and sales promotion manager.

Link-Belt Co., Chicago, Ill., has moved the Spokane, Wash., warehouse and district sales office to new and larger quarters in Spokane.

Robert Nickles, for the past few years engaged as a textile printing technician and at one time associated with the Rock Hill Printing and Finishing Co., has joined the newly organized technical textile sales division of **Hilton-Davis Chemical Co.,** Cincinnati, Ohio.

The Institute of Textile Technology, Charlottesville, Va., has announced the assignments of Kenneth A. Morrissey and Catesby Jones to the biology and organic chemistry divisions, respectively.

Harold E. Huber has been appointed head process engineer of the Votator division of **The Girdler Corp.,** Louisville, Ky.

Elliott Service Co., publishers of industrial relation services, has made the following executive personnel changes: Fred P. Wurtenberger, former vice-president, to president; Rich-

Moretex 3S* Size

Moretex 3S is a synthetic product which combines chemically with starches, gums, and gelatins to form a stable mix, which insures:

Uniform Sizing
Better Adhesion
Stronger Yarn
Smoother Yarn
Reduced Shedding

Easily Removed
Moretex 3S Sizings are easily removed by medium temperature washings.

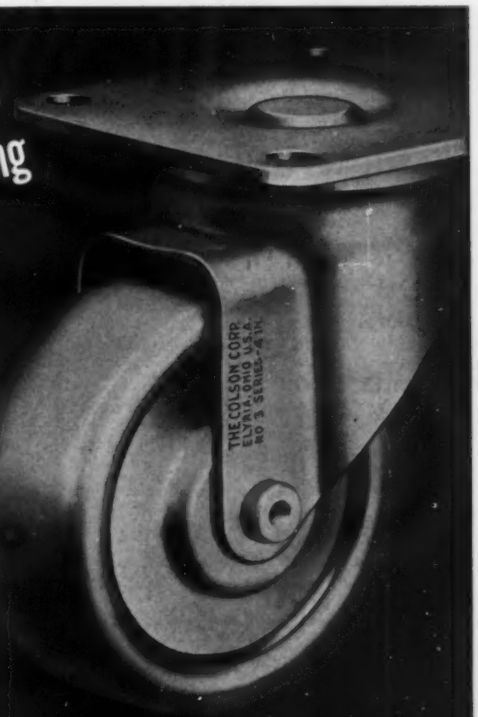
*Trade Mark applied for

New Different Better

Write for full information

Moreland Chemical Company Incorporated
Spartanburg, S.C.

Speed Up Your Old Equipment with New Load-Floating Colson Casters



Rolling equipment that doesn't roll easily reduces efficiency and profits in your mill. There are 1458 standard Colson casters—many designed especially for Textile mills. They roll easily over all floors, swivel freely, are rust-resistant. Many models have thread guards. Colson also manufactures a wide range of trucks for the Textile Industry—hand trucks, platform trucks, box trucks, drum and barrel trucks and special devices. Write us or consult your phone book for the local Colson office.

Model 3-427-16 with thread guards, designed especially for the Textile Industry.

Write Today For Free 68 Page Catalog

THE COLSON CORPORATION
ELYRIA, OHIO
CASTERS • • LIFT JACK SYSTEMS • • INDUSTRIAL TRUCKS

STOP LEAKS

ON ANY TYPE ROOF

TIN
IRON
CONCRETE
SLAG
GRAVEL
TAR PAPER
or FELT

with STONHARD ROOF RESURFACERS

No need to rip off your old roof or relay an expensive new roof — any maintenance man can do a perfect job by simply brushing or trowelling either the Liquid or Plastic Roof Resurfacer over your old roof. STONHARD ROOF RESURFACERS *stop* and *prevent* leaks in any type roof.

STONHARD COMPANY

Building Maintenance Materials
205 Stonhard Bldg., 1306 Spring Garden St.
PHILADELPHIA 23, PENNA.

Send for Free Folder

(SIMPLY ATTACH THIS TO LETTERHEAD)

Send me a FREE "Roofing Folder"

Firm_____

Mr._____ Title_____

Address_____

City_____ Zone____ State____

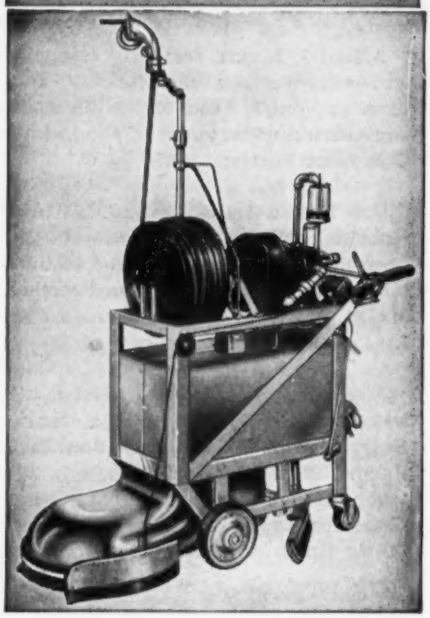
ard Lawrence, former editor of Suggestion Service, to vice-president; Arthur Wilkens, former superintendent of printing and mailing, to vice-president; Harry Townsend, former comptroller, to assistant treasurer; and Betty Vosburgh to assistant secretary.

E. I. du Pont de Nemours & Co. has announced the following changes: Dr. Frank K. Signaigo, former assistant director of the Pioneering Research Section at Buffalo, N. Y., has been made director of the Acetate Research Section, succeeding Dr. W. W. Heckert, now assistant manager of the Rayon Technical Division; Dr. Robert M. Hoffman has been transferred from manager to assistant director of the Pioneering section; Henry C. Froehling, former manager of the development section of the Rayon Technical Division, has joined the Acetate Division as New York district sales manager of "Orlon" acrylic fiber; Mr. Froehling succeeds Charles Wenrich, now district sales manager for acetate rayon yarns in the New York district; Dr. Donald F. Holmes, former field research supervisor, replaces Mr. Froehling as manager of the rayon development section; D. M. Thornton, III, group leader, has been named field research supervisor; W. D. R. Straughn, has been moved from the Providence Rayon division as district sales manager to the Acetate Division, Wilmington, Del., as manager of the technical service section; succeeding him in Providence is Henry G. Buckley; Millard G. Gamble, III, formerly at the Rayon Division's Charlotte, N. C., office, has been appointed district sales representative in charge of rayon staple sales at Providence, replacing Mr. Buckley.

A. F. Anjeskey, sales manager of the Cleveland Tramrail Division of The Cleveland Crane & Engineering Co., Wickliffe, Ohio, has been elected president of the **Monorail Manufacturers' Association,** New York, N. Y. Wilbur Mayer, sales manager of the Louden Machinery Co., Fairfield, Iowa, was chosen vice-president, and E. Donald Tolles, secretary-treasurer of the Association.

J. H. Oakes, former divisional sales manager, has been appointed sales manager for **Link-Belt Co.,** with headquarters in Philadelphia, Pa. Harry F. Kurz, former divisional sales manager in Philadelphia, will assist Mr. Oakes as representative, located in Chicago.

SCRUBS and SQUEEGEES FLOORS



LAWLOR 20-D

DOES BOTH JOBS

Only one operator is required to run this remarkable two-in-one machine. Clean water is fed from one tank upon the soaped floor, the 19" diameter revolving brush scrubs it quickly and thoroughly. Then a rubber squeegee mops up the dirty water which is vacuum pumped into a second tank.

JUST THE THING FOR LARGE AREAS

The Lawlor 20-D is only 22" wide and can be used in congested places around machines, counters and desks. Available for either AC or DC current.

MOP WRINGERS

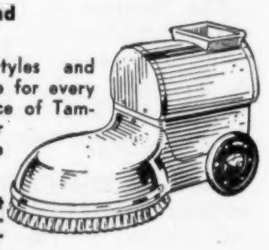
All steel with perforated rolls. Easy foot-lever operation. Made for one or two pails.

MOPPING TANKS

Heavy galvanized steel with welded seams. Two compartments, each with shut-off. Foot pressure wringers. 30 or 60-gallon capacity.

SCRUBBERS and POLISHERS

12 different styles and sizes, a right size for every need. Your choice of Tampico, Palmetto or Steel Wire brushes.



Lawlor Equipment is sold and serviced by local Janitor Supply Houses.

Write for Catalog giving description on the complete line

S. C. LAWLOR CO.

Makers of Quality Equipment for 50 Years

121 N. Aberdeen St., Chicago 7, Ill.

NEVEROIL BEARING COMPANY

49 Foundry Street

WAKEFIELD, MASSACHUSETTS

•

We manufacture two complete lines of self-luricating bearings for the textile field. The first, and lower cost, are made of northern Rock Maple, fully impregnated with the best known lubricants. Our leading products in this field are:

1. Maple harness sheaves with impregnated maple bushings.
2. Parallel blocks
3. Whip roll bearings
4. Crank arms
5. Tape tension pulley bearings

Our second type of bearing is made from powdered metal, as follows:

1. Porous Metal self-lubricating bearings, in many different alloys and densities
2. Non-corrosion nickel-copper bearings for bleacheries and dye houses
3. Iron and steel machine parts
4. Gears

We are regular suppliers to most of the leading textile machine manufacturers.

•

SALES OFFICES

Chicago, Illinois — Detroit, Michigan

Cleveland, Ohio

Ralph Gossett, Greenville, S. C. — Belton C. Plowden, Griffin, Ga.

PERSONAL NOTES

ABOUT MEN YOU KNOW

Herman M. Zimmermann, secretary of McCampbell & Co., Inc., has been elected chairman of the financial group of The Association of Cotton Textile Merchants of New York, succeeding **William Hansen,** Iselin-Jefferson Co., Inc.

Harry L. Ray, formerly with the Lawrence Mfg. Co., Lowell, Mass., and the Amoskeag-Lawrence Mills, Manchester, N. H., has been appointed superintendent of Nonquitt Mills, New Bedford, Mass.

Edward White, IV, formerly with drapery division of Simtex-Mills, has been appointed textile engineer

Mr. White

and stylist for the decorative fabrics of the Lumite Division, Chicopee Mfg. Corp., Cornelia, Ga.

J. H. Jackson, former card room overseer with Harding Mfg. Co., Rock Hill, S. C., has accepted a similar position with Bladenboro (N. C.) Mill No. 3.

S. W. Rice has been promoted from overseer weaving to general overseer weaving at Blair Mills, Belton, S. C. **Furman Lollis** and **James F. Carroll,** former loomfixers, have both been made shift foremen of weaving at Blair.

Stanley M. McNeilly, Bacon Felt Co., Winchester, Mass., has been elected vice-president of the Felt Association, and **Herbert S. Blake, Jr.,** president of Organization Service Corp., was re-elected secretary-treasurer. **Cornelius A. Hubner,** president of Central Felt Co., New York, N. Y., will remain as presi-

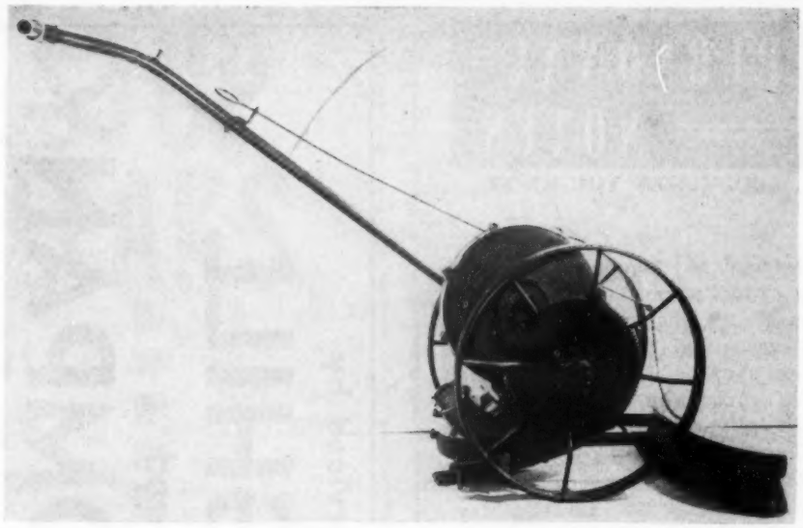
Manufactured and Serviced by

STODGHILL and COMPANY

ATLANTA GEORGIA

"The Size That Satisfies"

SUPERTAL



Patent applied for

IMPROVED Automatic Blower and Sweeper

The Improved Automatic Blower and Sweeper is designed for the Spinning, Spool and Twister rooms.

It's substantial, ball bearing. The brush in front sweeps up in front while a current of air forces the waste from under the frames in the next alley where the brush picks it up, etc.

It is reasonably easy to push, pushed by hand. Saves labor and brooms.

• Price $295.00
f. o. b. Atlanta, Ga.

MANUFACTURED BY

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HOW ANDERSON SHIELDS INCREASE SPINNING ROOM EFFICIENCY

Spinning rooms using Anderson Shields save time and money, and prevent disruption when unnecessary breaking, chipping, and splitting of bobbins and spools is avoided. In a year's time these items alone can amount to a surprising sum . . . Insist on Anderson and get the best protection metal shields afford . . . Watch your spinning room efficiency increase!

TEXTILE SHIELD CO., INC.

Metal Protection for Wood Turnings

J. N. ANDERSON, *Treas.*
LAWRENCE, MASS., U.S.A.

dent of the Association.

J. Freeman Cooley, former assistant plant superintendent, has become superintendent of the Bevelle Mill of Avondale Mills in Alexander City, Ala. He replaces **J. V. Nelson,** who has been appointed general manager of The Dunson Mills, LaGrange, Ga.

James P. Smith, former advertising manager of Burlington Mills Corp. of New York, has been appointed manager of over-the-counter piece goods sales for Southeastern Cottons, Inc., a subsidiary of Avondale Mills, New York, N. Y.

George D. McKinney, Jeannette Hosiery Mills, Inc., Elkins Park, Pa., has been elected for the fourth consecutive term as head of the Independent Association of Stocking Manufacturers.

William H. Jones, former executive vice-president, Railway Supply and Mfg. Co., Cincinnati, Ohio, has become associated with the Kauders-Steuber Co., New York, N. Y., cotton linters, and will be in charge of eastern operations.

The Atlantic Cotton Association has elected **W. D. Lawson, II,** of the W. D. Lawson & Co., Gastonia, N. C., as president of the Association succeeding **W. J. Duncan, Jr.,** of Duncan Cotton Co., Decatur, Ala.

Frederick W. Brown, former sales manager for Wintuff Chenilles, has joined the sales staff of Springs Mills, Inc., and will handle the department stores and buying offices throughout the country.

J. L. Lanier, West Point (Ga.) Mfg. Co., has been made the new vice-chairman of the Institute of Textile Technology. **Roger Milliken,** Deering Milliken & Co., New York, N. Y., will remain as chairman.

R. E. Covington has been elected to succeed the late **Ralph R. Janes** as general manager of Roanoke (Va.) Mills.

D. Gilbert Aston, formerly covering the Midwestern territory, has been appointed to head the finished goods department of the cotton and rayon fabrics division of William Whitman Co., Inc., New York, N. Y. **Edward P. Krebs,** formerly associated with Lampl Fashions, Inc., Cleveland, Ohio, and New York, where he was in charge of yarn

(*Continued on page* 221)

HELPFUL BOOKLETS FREE

Here is the "cream of the crop" of literature on textile subjects as prepared by TEXTILE INDUSTRIES advertisers to aid in mill operation and management. These reference books and catalogs are free for the asking and there is no obligation involved. Read through the list carefully for booklet on the subject or New Equipment in which you are interested. Then fill in the numbers of those desired on the coupon on page 220 and mail it to TEXTILE INDUSTRIES. ("First Listings" shown below are not confined solely to TEXTILE INDUSTRIES advertisers).

This service is restricted to those engaged in operation and management of textile industries

First Listing of New Publications

6-1. Belting Catalog by I. B. Williams & Sons. A new general-industry belting catalog emphasizes the selection of the right belt for the job, and points out the recommendations by the company for various installations. Tables and valuable information are given on motor and pulley specifications, line drawings show typical drives, and formulas aid in transmission calculations. Other information contained includes pointers on installation and maintenance, advantages of modern group drive, short center drives using leather belts and tension bases, and data on round leather belting. I. B. Williams & Sons, Dover, N. H.

6-2. Printing Machines. Catalog No. 491 illustrates printing machines which are in general use, however, as custom-machine builders, this company's engineers and designers are ready to take care of special requirements and design printing machines and handling equipment for fabric, plastic film and many other materials on which intaglio printing is done. Rice Barton Corp., Worcester 1, Mass.

6-3. Illuminated Magnifier. New bulletin available, "Pike Flash-O-Lens" which describes and illustrates the illuminated magnifier for textile inspection. The text tells what the unit is, its uses, how it works, and shows what models are available. E. W. Pike Company, 492 North Avenue, Elizabeth 3, N. J.

6-4. Industrial Preservative. A guide to formulating and applying Milmer 1, industrial preservative, is now available. Milmer 1, chemically copper-8-quinolinolate, is claimed to be one of the most powerful rot and mildew preventatives known. Monsanto Chemical Company, St. Louis 4, Mo.

6-5. Triangle Infra-red Ovens. The manufacturer has attempted to make this catalog simple and informative and has not gone into a lengthy discussion of Infra-Red nor elaborated on the limitless applications of this equipment. However, they have presented to the inquiring mind a series of provocative questions to encourage further exploration and study. Triangle Equipment Co., Inc., 45 River Road, Nutley, N. J.

6-6. Liquid Level Transmitter. This 4-page bulletin, "Taylor Force-Balance Liquid Level Transmitter," gives a clear and concise presentation of this device which is specifically designed to measure pressure and liquid level of viscous or corrosive liquids and liquids containing solids. It is particularly adaptable to open tanks as well as closed tanks under pressure or vacuum. Taylor Instrument Companies, Rochester 1, N. Y.

6-7. Equipment for Cotton Mills. A profusely-illustrated 24-page booklet which shows this manufacturer's equipment for cotton mills. Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa.

6-8. Condensate Drainage Control. Data on steam flow conditions and heat exchange characteristics make the technical portions of this new book, Publ. No. 3250, particularly useful to engineers responsible for the efficient transfer of steam heat in heating, cooking, drying, and pressing operations. Cochrane Corp., Philadelphia 32, Pa.

6-9. Pack to Attract. The importance of attractive packaging in selling is emphasized in a new book available from this manufacturer. Many types of packaging are shown in this idea-jammed, dramatic, colorful and profusely illustrated publication. The Hinde & Dauch Paper Co., Sandusky, Ohio.

6-10. Hard Maple Flooring Finishing. To provide maintenance engineers and others concerned with this task with a guide to good floor house-keeping, the Maple Flooring Manufacturers Association has announced the publication of a new illustrated folder "Finishing Northern Hard Maple Flooring the NFMA Way." Maple Flooring Manufacturers Association, 46 Washington Blvd., Oshkosh, Wis.

6-11. Stop and Prevent Leaks. Now your own maintenance man can quickly and easily stop and prevent leaks in your old roof, whether it is tin, iron, concrete, slag, gravel, tar paper or felt. This latest folder shows how you can economically repair your roof without involved preparation simply by using a brush or a towel. Stonhard Company, 500 Stonhard Bldg., 1306 Spring Garden St., Philadelphia 23, Pa.

6-12. "If Prices and Sales Dropped X%." The Analysis is designed to enable the businessman to make a thorough review of his position today. It outlines the steps he can take now to face the uncertainties of tomorrow. It is divided into four parts covering the following points: How to Check Your Current Position; How to Analyze Your Vulnerability; How to Project Sales, Costs, Cash, Margins; and Figuring Your Future Position. The Research Institute of America, Inc., 292 Madison Avenue, New York 17, N. Y.

6-13. "How to Use Tite-Fit Burlap Tubing." A new, handy pocket-size book tells the complete story of how Bemis Tite-Fit Tubing saves shipping costs. Completely illustrated, the book shows how to wrap for shipment such unweildy items as coiled rubber hose, leather belting, rolled carpet, heavy cotton, etc. Bemis Bros. Bag Co., 2nd ave. and 51st St., Brooklyn 32, N. Y.

6-14. Reeds Upkeeping Machine. A detailed description of newly designed, fully automatic equipment for the reconditioning and regrinding of reeds. Also available is illustrated folder describing an entirely new approach to precision grinding of flats. American Textile Engineering, Inc., Arlington, N. J.

6-15. Custom Made Thread Guides. Bulletin 491 is a valuable reference book for the operating textile executive. This 24-page book is well illustrated and contains complete descriptions and specifications on this manufacturer's line of thread guides. American Lava Corp., Chattanooga, Tenn.

6-16. Permanent Magnetic Pulleys. Bulletin 350 describing a new line of permanent magnetic pulleys. Contains features, illustrations, specifications, dimensions, capacities and typical applications. Pulleys are non-electric, require no wiring or electrical connections and can be used under all atmospheric and operating conditions. Stearns Magnetic Mfg. Co., Milwaukee 4, Wis.

GENERAL ECONOMIC, MANAGEMENT . . .

4. HOW FACTORING CAN INCREASE PROFITS—Describes how factoring works out in keeping clients' capital liquid and attitude of factor toward checking credits, including typical balance sheet.—COMMERCIAL FACTORS CORP., New York City.

5. FACTORING AND FINANCING — Illustrated booklet on how factoring works, cost and credit information.—TEXTILE BANKING COMPANY, New York, N. Y.

6. ROYCE REPORTER—Published quarterly containing information of general interest to the textile field.—ROYCE CHEMICAL CO., Carlton Hill, N. J.

7. RAYON TELLS ITS STORY TO THE PUBLIC—Folder containing reprints of advertisements explaining some of the many roles in which rayon is serving the American public.—AMERICAN VISCOSE CORPORATION, New York 1, N. Y.

9. TESTING IN MODERN INDUSTRY — This booklet includes many useful tables, conversion factors, equivalent yarn sizes and other information helpful in textile mills. Also describes specialized testing service. Available free to mill men on request.—UNITED STATES TESTING CO., Hoboken, New Jersey.

10. "LABOR AND MANAGEMENT BENEFIT BY INDUSTRIAL ENGINEERING PRINCIPLES"—8-page illustrated folder outlining principles of industrial engineering as they apply to textiles.—AMERICAN ASSOCIATED CONSULTANTS, INC., New York, N. Y.

11. FLETCHER JUNIOR "SUPER-SELF-BALANCING" EXTRACTOR—Illustrated folder describing this new extractor with the highly efficient self-balancing arrangement which uses steel springs instead of rubber buffers.—FLETCHER WORKS, INC. Philadelphia, Pa.

PLANT AND PLANT MAINTENANCE . . .

102. "TANK TALK"—Sixteen page booklet of illustrations showing various types of elevated steel tanks constructed and erected by manufacturers as well as stand pipes, reservoirs, storage and high pressure vessels, cylinders, along with helpful technical data. Also a list of what a few of the cotton mills, etc., said.—R. D. COLE MANUFACTURING COMPANY, Newnan, Ga.

103. HUMIDIFICATION, EVAPORATIVE COOLING—Bulletins available displaying AMCO automatic self-cleaning atomizers, controls, and evaporative cooling equipment.—AMERICAN MOISTENING COMPANY, Providence, R. I.

105. FLUORESCENT LIGHTING FIXTURES—Specification sheets describing in detail industrial lighting fixtures of particular interest to the textile industry. Full information given on construction, light curve, methods of hanging, etc.—SMITHCRAFT LIGHTING DIVISION, Chelsea 50, Mass.

107. FINNELL SCRUBBERS — Illustrated leaflets describing and giving specifications for the new Finnell floor scrubbing machines.—FINNELL SYSTEM, INC., Elkhart, Ind.

115. ATOMIZER HUMIDIFIER — Recent issue of "Parks' Parables" on Turbomatic self-cleaning humidifiers, and automatic regulation. — PARKS-CRAMER CO., Fitchburg, Mass., and Charlotte, N. C.

129. BAHNSON CENTRIFUGAL HUMIDIFER—Bulletin 327 describes this completely self-contained industrial humidifier which requires only water feed and drain and electrical connection to install.—THE BAHNSON COMPANY, Winston-Salem, N. C.

135. SAFETY COLOR CODE—How six standard colors can be used to reduce hazards, cut down accidents.—E. I. DU PONT DE NEMOURS & CO., INC., Finishes Division, C44, Wilmington, Dela.

138. MAGNESIUM IN THE TEXTILE INDUSTRY—Illustrated booklet on properties of magnesium for spinning, twisting, winding, knitting machines, looms, beams, spools, bobbins.—ALUMINUM CO. OF AMERICA, Pittsburgh, Pa.

150. RIHCO HUMIDIFIERS AND COOLING SYSTEMS—Bulletin describes new atomizers with construction lessening air consumption in humidifier systems, evaporative cooling systems. — ALDRICH MACHINE WORKS, Greenwood, S. C.

151. INDUSTRIAL BRUSHES—Illustrated Booklet of industrial brushes featuring textile usage on shears, printing machines—also flock, raising and cylinder brushes.—M. W. JENKINS' SONS, INC., Cedar Grove, N. J.

152. AIR CONDITIONING FOR THE TEXTILE INDUSTRY—40-page illustrated book covering air conditioning from humidity control to complete refrigerated conditioning with installations, charts, covering ABC's of cooling textile mills.—CARRIER CORP., Syracuse, N. Y.

159. BAHNSON HUMIDUCT SYSTEM — Bulletin 330 describes this unit system of air conditioning for humidifying, cooling, heating, ventilating, filtering, and dehumidifying in any desired combination. —THE BAHNSON CO., Winston-Salem, N. C.

162. MODERN METHODS OF TEXTILE FLOOR MAINTENANCE—Illustrated treatise on the history of floor cleaning in textile plants and a detailed description of new methods for reducing floor cleaning costs, as well as preserving textile mill floors.—G. H. TENNANT COMPANY, Minneapolis 11, Minn.

163. LAWLOR FLOOR MACHINES — Illustrated pamphlet containing specifications and describing All-Purpose Floor Machines.—THE SELIG COMPANY, Atlanta, Ga.

166. OAKITE PLANT MAINTENANCE DIGEST—A 16-page manual describing materials and methods for handling 54 recurring maintenance cleaning and related tasks in factories and mills.—OAKITE PRODUCTS, INC., New York 6, N. Y.

170. WHY IT PAYS TO ANCHOR YOUR TEXTILE MACHINES WITH UNISORB — Illustrated booklet discussing control of vibration and noise and how UNISORB reduces maintenance costs.—THE FELTERS CO., Boston, Mass.

172. VENTILATING FANS — Bulletin 3339 gives facts on Buffalo Ventilating Fans. — BUFFALO FORGE CO., Buffalo, N. Y.

177. DUCTLESS AIR CONDITIONING — Recent bulletin describing same.—AMERICAN MOISTENING COMPANY, Providence, R. I.

179. TOLEDO SCALES — A condensed catalogue which illustrates and describes all of the principal types of weight control equipment used in the textile industry. — TOLEDO SCALE COMPANY, Toledo, Ohio.

180. TANK MAINTENANCE — Illustrated folder describing R. E. McLean's methods of cleaning and painting water tanks and stand pipes. — R. E. McLEAN, Gastonia, N. C.

181. AIR FILTRATION AND DUST CONTROL—24 pages on atmospheric control, including engineering data.—AMERICAN AIR FILTER CO., INC., 275 Central Avenue, Louisville 8, Ky.

POWER TRANSMISSION, MOTORS, BELTING, LUBRICATION . . .

201. ROLLER CHAINS, ETC.—Catalogs RC-49 and V-135-46 supply practical information, advantages and complete specifications helpful in selecting the proper power transmission chain drive to meet the requirements of textile machinery.—WHITNEY CHAIN & MFG. CO., Hartford, Conn.

203. BELTING & RUBBER GOODS—A condensed catalog on belting, V-belts, hose and other textile rubber goods is available.—RAYBESTOS-MANHATTAN, INC., Passaic, N. J.

205. AUTOMATIC PRODUCTION CONTROL — Bulletin GN-487 on automatic speed control of many machines and processes through Variable Speed Equipment with mechanical and hydraulic automatic controls. Contains many illustrations, drawings and complete description of many applications.—REEVES PULLEY COMPANY, Columbus, Ind.

211. JOHNSON BRONZE CATALOGUE NO. 460—Shows over 850 sizes of cast bronze bushings, 350 sizes of UNIVERSAL Bronze Bars and over 250 Electric Motor Bearings. — JOHNSON BRONZE COMPANY, New Castle, Penna.

212. GATES TEXTILE ACCESSORIES — Showing the increased efficiency and economy to be secured through the use of Gates cone belts, evener belts, card bands and loom binder cushions.—THE GATES RUBBER COMPANY, Denver, Colo.

216. LEATHER BOOKLET NO. 202 — Attractive book illustrating and describing BONDARON Special Tanned Leather as used in various forms such as Check Straps, Solid Round Leather Belting, Flat Belting.—CHAS. ROND CO., Philadelphia, Pa.

218. BALL BEARINGS ON TEXTILE MACHINERY—Catalog 9 gives advantages of ball bearings, describes types, illustrates each type of textile machinery.—THE FAFNIR BEARING CO., New Britain, Connecticut.

231. V-BELT ENGINEERING DATA BOOK—Over 50 pages of pertinent engineering information including data on selecting a V-belt drive design of special V-belt drives, numerous standard tables, charts and belt and sheaves list prices. — MANHATTAN RUBBER MANUFACTURING DIV. of Raybestos-Manhattan, Inc., Passaic, N. J.

235. JOHNSON LEDALOYL BEARING BRONZE—Illustrated booklet telling the complete story of Johnson Ledaloyl Bronze, the newest development in self-lubricated bronze for textile bearings and bushings.—JOHNSON BRONZE COMPANY, New Castle, Pennsylvania.

236. LEATHER BELTING CALCULATOR—Handy and attractive calculator for determining belt, speeds, horsepower per inch of belt widths, etc., will be sent free on request.—J. E. RHOADS & SONS, Philadelphia, Pa.

244. TEXACO SPINDURA OILS—Folder on lubrication for all types of spindles, based on actual tests.—TEXAS CO., New York City.

251. OILITE BEARINGS AND PARTS—Catalog B44 describes and illustrates Oilite bearings and parts for all industries. — AMPLEX DIVISION, Chrysler Corporation, Detroit 31, Mich.

263. NEEDLE ROLLER BEARING—Catalog Engineering and Application Data Edition 32 contains full data on selection of proper Needle Roller Bearings and outlines uses of such in various commodities including textile uses, types, installations, lubrication, etc. — TORRINGTON COMPANY, Torrington, Conn.

264. NEW DEPARTURE SHOP MANUAL—Illustrated catalog showing ball bearing mounting and maintenance practice. Covers storage, cleaning, lubrication, types of bearings.—NEW DEPARTURE DIV., GENERAL MOTORS CORP., Bristol, Conn.

265. INTERCHANGEABLE BALL BEARING FOR REPLACEMENT—Charts showing numbers used by manufacturers to identify bearing characteristics, also information on specifications.—NEW DEPARTURE DIV., GENERAL MOTORS CORP., Bristol, Conn.

269. LUBRICATION AND MAINTENANCE OF BALL AND ROLLER BEARINGS—Illustrated bulletin describing efficiencies and economies of NON-FLUID OIL for all types ball and roller bearings.—NEW YORK AND NEW JERSEY LUBRICANT CO., New York, N. Y.

270. MANHATTAN FLEXLASTICS — Illustrated booklet describing how flexlastics are used in the Manhattan and Condor line of belting and mechanical rubber goods.—MANHATTAN RUBBER DIVISION, Passaic, N. J.

271. CARDING, SPINNING AND WEAVING LUBRICATION—Informative bulletin describing advantages of NON-FLUID OIL over ordinary lubricants for the lubrication of carding, spinning and weaving machinery.—NEW YORK AND NEW JERSEY LUBRICANT CO., New York, N. Y.

272. HOUGHTON LUBRICATION CHART — Attractive chart listing lubrication recommendations for all mill departments and various textile machines.—E. F. HOUGHTON AND CO., Philadelphia, Penna.

275. HYATT ROLLER BEARINGS — A 16-page bulletin giving details of the application of roller bearings to all types of textile machinery.—HYATT BEARINGS DIV., General Motors Corp., Harrison, New Jersey.

276. SPEED CONTROL—Bulletin 20B6051G describes Texrope variable speed drives. — ALLIS-CHALMERS MFG. CO., Milwaukee 2, Wis.

277. PRECISION COMPOUND AND CHAIN DRIVE—Folder explaining more profitable operation of roving frames.—PRECISION GEAR AND MACHINE CO., Charlotte, N. C.

279. OILITE BULLETIN—Discussion of uses of oil-cushioned, self-lubricating bearings in product design and maintenance is contained in this illustrated bulletin. A wide range of machine parts is offered.—AMPLEX DIV., CHRYSLER CORP., Detroit 31, Mich.

280. BALL BEARING PILLOW BLOCKS AND FLANGE CARTRIDGES—Folder LAK contains informative text on ball bearing pillow blocks and flange cartridges incorporating the Fafnir Wide Inner Ring Bearings suitable for new as well as replacement applications in textile machinery.—THE FAFNIR BEARING CO., New Britain, Conn.

INSTRUMENTS, STEAM SPECIALTIES . . .

301. JOHNSON ROTARY PRESSURE JOINTS—Bulletin describing the rotary pressure joint which requires no packing, no lubrication and no adjustment, giving installation and maintenance instruction, types, sizes, dimensions and prices. — THE JOHNSON CORP., Three Rivers, Mich.

305. FLOWRATOR—Catalog Section 25-E contains full and detailed information on this company's Series 700 Flowrator. Contains many illustrations.—FISCHER & PORTER, Hatboro, Pa.

307. THERMOMETER AND PRESSURE GAUGES—Catalog 6705-R and 6706 give data on both circular and rectangular case pressure type thermometers for indicating, recording and controlling processing operations in textile industry.—BROWN INSTRUMENT COMPANY, Philadelphia, Pennsylvania.

311. PIPING POINTERS—Industrial maintenance book covering installation and handling of piping, valves, fittings. Well illustrated, practical tips. — CRANE CO., Chicago, Ill.

314. MOISTURE CONTENT CONTROL — Bulletin F-1705-1 giving details of features and benefits of moisture equipment control for slashers and textile application. — BARBER-COLMAN CO., Rockford, Ill.

315. CONTROL INSTRUMENTS FOR TEXTILE PROCESSES—32-page illustrated booklet describing controls for such processes as slashing, dyeing, bleaching, kier boiling, drying, air-conditioning, etc. —BROWN INSTRUMENT CO., Philadelphia, Penna.

316. HYDRAULIC POWER UNITS—Literature describing hydraulic unit, motor, pump, reservoir, valving a small compact unit for operating of hydraulic calenders, presses, hydraulic controls, etc.—R. F. PERKINS & SON, INC., Holyoke, Mass.

317. MIDGET PSYCHROMETER — Technical discussion of method for instant moisture determinations during various stages of textile manufacture.—KEARNY MANUFACTURING CO., INC., Kearny, N. J.

319. GUIDE TO CORRECT INSTRUMENT SELECTION—This completely revised edition gives a comprehensive bird's-eye view of the companies' entire instrument line. Bulletin 98170. — TAYLOR INSTRUMENT COMPANIES, Rochester 1, N. Y.

320. OAKITE POWER PLANT DIGEST—A 20-page manual describing materials and methods for handling 71 cleaning, degreasing, descaling, derusting, paintstripping and related operations encountered in power plants.—OAKITE PRODUCTS, INC., New York 6, N. Y.

321. RED-RAY BURNERS — Bulletin describing use of Red-Ray Burners in preheating and partial drying to increase capacity of frame.—RED-RAY MFG. CO., New York, N. Y.

CARDING, SPINNING, WINDING . . .

401. LUMMUS DUSTLESS, STEEL, BLENDING FEEDERS—Bulletin describing automatically closing, positively locking door on feeders to prevent overloading, choking. — ALDRICH MACHINE WORKS, Greenwood, S. C.

402. AUTOMATIC CLEANING AND OVERHEAD HANDLING FOR TEXTILE MILLS—24-page bulletin describing the American Monorail Automatic Cleaner for preventing accumulation of lint on spinning, twisting, winding and warping machines. Also for cleaning monitors and card room ceilings.—THE AMERICAN MONORAIL CO., Cleveland, Ohio.

403. WINDING MACHINES—PRINCIPLES AND PRACTICES—This series has been running for some time in TEXTILE INDUSTRIES and has now been made available in booklet form for those in the industry who desire copies.—UNIVERSAL WINDING COMPANY, Providence, R. I.

404. LAPLESS ENDLESS SPINNER — Bulletin and full information will be supplied on lapless endless spinner and coning belting.—TON-TEX CORPORATION, 18 West 61st St., New York, N. Y.

405. AUTOMATIC SPINNING CONTROL — New folder available describing the Numo automatic control specifically designed to eliminate uneven packages and tails.—NUMO MACHINE & ENGINEERING CO., Charlotte, N. C.

407. CARD GRINDER INFORMATION—Folder on care of card grinders, part replacement, etc.—R. S. ROY & SONS CO., Worcester, Mass., and Greenville, South Carolina.

409. ROTO CONER—Bulletin describing Universal rotary traverse winder, known as the Roto Coner, producing open wound cones or knitting and warping; parallel tubes for package dyeing, twisting, and sale yarn.—UNIVERSAL WINDING CO., Providence Rhode Island.

413. SONOCO PRODUCTS—A 60-page illustrated booklet giving description, specifications and charts of the many Sonoco products, including bobbins, cones, tubes, cork pots, roving cans, spools, rolls, etc.—SONOCO PRODUCTS CO., Hartsville, S. C.

416. THE BRIEF SAGA OF THE RING TRAVELER—An interesting history relative to the ring traveler, which is in reality the basis of the spinning frame. John Thorpe's invention of the ring traveler, the development of the spindle, and the invention of Rabath's Bolster type spindle are covered. — NATIONAL RING TRAVELER CO., Pawtucket, R. I.

417. SAGA OF THE RING TRAVELER—Part II of this interesting history is now available.—NATIONAL RING TRAVELER CO., Pawtucket, R. I.

419. TEXTILE APRONS—Illustrated folder showing the steps in manufacture of genuine leather aprons for all types of long draft spinning and card room machinery. — TEXTILE APRON COMPANY, East Point, Ga.

421. AUTOMATIC WINDERS—Folder describing latest winding equipment with full automatic operation. Only one automatic head for up to 100 spindles.—ABBOTT MACHINE CO., Wilton, N. H.

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422. MODERN TEXTILE ROLL COVERING—Illustrated booklet on roll covering problems with chart on correct usages. Also data on Acetex long draft aprons.—ARMSTRONG CORK CO., Industrial Division TEXTILE PRODUCTS SEC., Lancaster, Pa.

423. TEXTILE SHEET METAL PRODUCTS—Folder on cylinders, card screens, licker-in screens, repair work.—JENKINS METAL SHOPS, INC., Gastonia, North Carolina.

427. WINDING AND CREELING WARP YARNS—Universal's Bulletin No. 443 contains an interesting treatment of this subject.—UNIVERSAL WINDING COMPANY, Providence, R. I.

428. PNEUMATIC ROLL PICKER—Attractive bulletin descriptive of the "Amoskeag" roll picker that removes fly and lint from the top rolls and other drafting elements in spinning and roving frames.—M-B PRODUCTS, Detroit, Mich.

429. HYGROLIT YARN CONDITIONING SYSTEM—Illustrated folder No. 901A describing the Hygrolit process of chemical yarn conditioning.—KEARNY CO., INC., Kearny, N. J.

430. "SLIXONICE" BEARINGS—Folder is available on this new, frictionless bearing "that never needs lubrication."—DIXON LUBRICATING SADDLE COMPANY, Bristol, R. I.

433. AUTOMATIC TRAVELING CLEANERS—Recent issue of "Parks' Parables" on automatic cleaners for spinning, warping, twisting.—PARKS-CRAMER CO., Fitchburg, Mass., and Charlotte, N. C.

435. DOUBLE DECK TWISTERS—For accurate, high-speed twisting of silk, rayon, nylon, etc., to the finest of deniers are described in this new bulletin. Both the Jumbo (8-ounce to 16-ounce headless or takeup spool packages) and Acme (up to 10-ounce packages) machines are illustrated.—U. S. TEXTILE MACHINE CO., Scranton 8, Pa.

436. MAINTENANCE INFORMATION FOR YOUR SCOTT TESTER—Booklet containing maintenance data for calibration of Scott Testers, clamps for testers, gear-box lubrication, and recording.—SCOTT TESTERS, INC., Providence, R. I.

437. SPINDLE TAPE LACING EQUIPMENT—Circular No. 54 illustrating and describing the Clipper method of joining spindle tapes.—CLIPPER BELT LACER CO., Grand Rapids 2, Mich.

439. JUMBO DOUBLER TWISTER—Doubling and twisting in one economical operation, combining from two to twelve ends of yarn, the U. S. Acme Jumbo Dealer Twister is described and illustrated in this bulletin.—U. S. TEXTILE MACHINE CO., Scranton 8, Pa.

440. SADDLES—Leaflet showing a few of the over 400 different types of saddles for both conventional and long draft spinning and roving frames.—DIXON LUBRICATING SADDLE CO., Bristol, Rhode Island.

441. SKF BALL BEARING TENSION PULLEY FOR SPINNING FRAMES—Attractive illustrated folder outlining the value of anti-friction bearing Tension Pulleys for all types of spinning frames.—SKF INDUSTRIES, INC., Philadelphia, Pa.

443. COMPARATIVE YARN TABLE—Chart giving woolen number (cut and run system), also cotton worsted and metric system; also, Comparative Rayon Denier Yarn Table.—VICTOR RING TRAVELER CO., Providence, R. I.

444. SOL LUSTRE—Attractive illustrated booklet describing Houghton's soluble softening and conditioning oils for textile fabrics and yarns.—E. F. HOUGHTON AND CO., Philadelphia, Penna.

445. ROLLER BEARING SPINDLES—Illustrated booklet showing various types of Marquette Roller Bearing Spindles. The unique full-floating footstep bearing is pictured in cut-away views, and its advantages are described.—THE MARQUETTE METAL PRODUCTS CO., Cleveland, Ohio.

447. CONE WINDER—Form A95 describes the Foster Model 102 winder which produces the Foster knitting cone for spun yarns, warping cones and tubes for dyeing and twister supply.—FOSTER MACHINE COMPANY, Westfield, Mass.

WEAVING, SLASHING . . .

502. TEXTILE COUNTERS—Catalog T-48 describing pick counters for looms, hank counters for spinning, yardage counters for cloth loom, etc.—VEEDER-ROOT, INC., Hartford, Conn.

510. THE ROMANCE OF PRAIRIE GOLD—Attractive illustrated book which tells the story of corn and the uses of corn products in industry.—CORN PRODUCTS SALES CO., New York, N. Y.

512. BRIGHT SPOT IN THE PRODUCTION PICTURE—Folder on more loom speed through Hunt loom spreaders.—HUNT MACHINE WORKS, INC., Greenville, S. C.

513. SEYCO PENETRANTS FOR YARN CONDITIONING—Folder describing the scientifically formulated Seyco sizing. — SEYDEL-WOOLLEY & CO., Atlanta, Ga.

515. TEXTILE COUNTERS—Catalog No. 56 illustrating and describing complete line of Productimeter Loom Pick Counters; Hank Counters; Yardage, Electric and Predetermined Counters; Tachometers, etc. — DURANT MANUFACTURING CO., Milwaukee 1, Wisconsin.

516. WEAVE ROOM ACCESSORIES—Weave room accessories catalog and literature on new plastic, bronze bearing sheave, which solves a troublesome weave room problem.—HAMMOND LOOM HARNESS COMPANY, Lawrence, Mass.

517. LOADING SYSTEM—Bulletin 417, on pneumatic loading system for Saco-Lowell slasher size box squeeze rolls, contains installation photo, features, specifications, and prices.—THE FOXBORO COMPANY, Foxboro, Mass.

518. NIAGARA TWIST-SETTER—Folder describing the revolutionary Niagara Twist-Setter which has no moving parts. The yarn is sprayed from all sides to afford maximum economy.—SEYDEL-WOOLLEY & CO., Atlanta, Ga.

519. WOODEN BEAM HEADS, WARPER BEAMS, AND WARPING MACHINERY FOR ALL FIBERS—62-page illustrated booklet descriptive of and giving specifications for the Allen line of beam heads, warper beams, warping machinery, stop motions and cloth rolls.—ALLEN COMPANY, New Bedford, Mass.

520. PNEUMATIC LOADING SYSTEM—Bulletin 418 contains installation photo, features, specifications and prices for pneumatic loading system for Charles B. Johnson Machine Works slasher squeeze rolls.—THE FOXBORO COMPANY, Foxboro, Mass.

521. STEEL WARP BEAMS—20 page catalog No. 45 illustrating Standard and Special Purpose Warp Beams for the weaving industry, both broadloom and narrow fabrics. Also Textile Machinery Specialties.—MILTON MACHINE WORKS, INC., Milton, Pa.

523. OVERHEAD MOUNTS FOR BIGGER LOOM BEAMS—Folder illustrating and describing how bigger beams can be adapted under all mill conditions. Includes handy Multiplier Table showing increased yarn capacity possible with bigger beams.—WEST POINT FOUNDRY & MACHINE COMPANY, West Point, Ga.

524. JOHNSON WARP SIZER—12 page fully illustrated booklet, describing the 7 cylinder sizer with stretch indicator and finger-tip control of stretch. A point-by-point analysis.—CHARLES B. JOHNSON MACHINE WORKS, Paterson, N. J.

525. GATES LOOM ACCESSORIES — Catalogs MRG-418, MRG-421, MRG-422 describe the advantages of lug straps, harness straps and drop box pickers made from a remarkable new material called Tex-Hide. Catalog MRG-419 describes the advantages of a new "Tractive-Rib" take-up roll covering.—GATES RUBBER CO., Denver 17, Colorado.

526. LOOM EQUIPMENT—Folders on flat heddles, frames, and reeds for all types of looms and weaves.—WALKER MFG. COMPANY, Philadelphia 35, Pa.

528. PARTS, CATALOGS FOR WPF&M SLASHERS, SIZE KETTLES AND PUMPS—This 42-page illustrated catalog of parts contains exploded views and part numbers for quick identification.—WEST POINT FOUNDRY & MACHINE COMPANY, West Point, Ga.

DYEING, FINISHING, CLOTH ROOM . . .

602. ALUMINUM IN THE CHEMICAL INDUSTRY—Published by Aluminum Company of America. Seventy-eight pages. Text and illustrations covering adaptability of aluminum and aluminum alloys to chemical industry applications and characteristics governing recommended uses. — ALUMINUM COMPANY OF AMERICA, Pittsburgh, Pa.

605. CONTINUOUS AUTOMATIC EXTRACTING MACHINE—Folder describing the most efficient method of extracting excess liquid from fibrous materials.—C. G. SARGENT'S SONS CORP., Graniteville, Mass.

610. PROCTOR DRYING MACHINERY FOR THE TEXTILE INDUSTRY—Illustrated, descriptive catalog on all types of dryers for raw stock, warps, package dyed and automatic skein yarn. Also includes Preboarding and Automatic Boarding Machines for hosiery.—PROCTOR & SCHWARTZ, INC., Philadelphia, Pa.

611. BRUSHING AND SHEARING MACHINES—Illustrated literature on the new Hermas Brushing Machine for use light sheeting to heavy ducks; also on Hermas AV Shears.—HERMAS MACHINE CO., Hawthorne, N. J.

612. WET GOODS TRUCK—Illustrated bulletin which describes fully this stainless steel wet goods truck. Complete specifications and information given. —S. BLICKMAN, INC., Weehawken, N. J.

613. RADIANT HEAT IN TEXTILE INDUSTRY—New illustrated book on uses of radiant heat, data on fuel consumption, evaporation, etc.—RED-RAY MFG. CO., New York, N. Y.

614. STRIPS IN ROLLS—Form No. CF-642 illustrated folder showing over 25 slitters and roll winders for textile use.—CAMERON MACHINE CO., Brooklyn, New York.

616. ENGINEERING PROPERTIES OF MONEL—Technical Bulletin T-5, giving detailed information on strength and ductility, working properties, resistance to various types of corrosion and other data on Monel Metal. — INTERNATIONAL NICKEL CO., INC., New York, N. Y.

617. AUTOMATIC CONTROL SYSTEM FOR CONTINUOUS BLEACHING—Illustrated folder describes the new method of controlling the temperature, pressure, and liquid level in the continuous bleach operation.—TAYLOR INSTRUMENT COMPANIES, Rochester 1, N. Y.

621. INFRA-RED RADIANT HEAT GENERATORS—Illustrated bulletins on infra-red technology and applications throughout Textile pre-drying, drying, polymerizing, printing and other heat-processing operations. — CARBOMATIC CORPORATION, New York, N. Y.

622. FILT-R-STIL—Attractive illustrated booklet describing the FILT-R-STIL method of chemically purifying water.—AMERICAN CYANAMID & CHEMICAL CORP., New York 20, N. Y.

625. BALL BEARING ROLLER TYPE SCRAY—Circular No. 964 describing this scray which is for use in handling heavy and large size rolls of cloth. This is used either in finishing plants or in the cloth room of cotton mills.—BIRCH BROS., INC., Somerville, Mass.

626. GUIDER AND GUIDING EQUIPMENT—This booklet entitled "Mount Hope Precision Guider and Guiding Equipment" describes this latest development in guiding equipment. The new guider, it is claimed, makes possible automatically controlling the lateral movement of cloth within closer limits than ever before possible.—MOUNT HOPE MACHINERY CO., Taunton, Mass.

627. SINGLE APRON STOCK DRYER—Folder presenting the latest idea in automatic drying which every mill having drying problems can profitably use to meet modern manufacturing conditions.—C. G. SARGENT'S SONS CORP., Graniteville, Mass.

629. STAINLESS STEEL WARE—New data sheets available on this line of stainless steel pails, dippers, buckets and Blickman-Built fully enclosed stainless steel Dye Box.—S. BLICKMAN, INC., Weehawken, N. J.

630. VAT DYEING OF WOOL—Write for Calco Technical Bulletin No. 797 outlining fundamental dyeing procedures, and explaining new advances in the technology of wool dyeing and finishing.—CALCO CHEMICAL DIVISION, AMERICAN CYANAMID CO., Bound Brook, N. J.

632. LUG STRAP WASHERS—Series 1-C illustrated bulletin detailing right and wrong application and use of washers.—E. H. JACOBS NORTHERN DIVISION, Danielson, Conn.

633. PRINTING WITH ARIDYE PIGMENT COLORS—Bulletin P-1—describes preparation and application of pigmented water-in-oil emulsions for printing cotton, rayon, and other fabrics.—INTERCHEMICAL CORPORATION, TEXTILE COLORS DIVISION, Fair Lawn, N. J.

634. APPLICATION OF INTERCHEM ACETATE DYES—Bulletin IAD-1 describes procedures for dyeing and printing acetate rayon and nylon fabrics with new line of highly dispersed acetate dyes.—INTERCHEMICAL CORPORATION, TEXTILE COLORS DIVISION, Fair Lawn, N. J.

DYESTUFFS, CHEMICALS, SOAPS . . .

705. THEORETICAL AND APPLIED SILK-SOAKING—Attractive 23-page booklet outlining methods of silk-soaking and outlining investigation on the soaking, back-winding and degumming of silk.—HART PRODUCTS CORP., New York City.

710. HERCULES PINE OILS—Leaflet briefly describing advantages of using this manufacturer's oil in wet-processing of textiles.—HERCULES POWDER COMPANY, Wilmington, Del.

712. VANDERBILT MATERIALS—Available is a 6-page booklet describing non-toxic fungicides, starch stabilizers, dispersing agent clay and talc and their use in textile operations.—R. T. VANDERBILT CO., INC., New York, N. Y.

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718. **LIOVATINE ED**—Vat dyeing assistant increasing penetration and level dyeings with maximum yield of color.—SANDOZ CHEMICAL WORKS, New York City.

715. **AQUAROL AND ARKANSAS PRODUCTS**—Bulletins on Aquarol, water repellent finish with method of preparing bath; also on other Arkansas products for cotton, wool, silk and rayon, hosiery processing.—ARKANSAS CO., INC., Newark, N. J.

717. **FINISH KB**—Finishing compound designed as binder in combination with filling and stiffening compounds. Avoids dusting, insures draping qualities. — SANDOZ CHEMICAL WORKS, New York City.

720. **SYNTHETIC FIBERS** — Attractive folder briefly describing the company's products used in the manufacture of synthetic fibers. — HERCULES POWDER COMPANY, Wilmington, Del.

725. **TEXTILE PROCESSING**—Bulletin No. 5, interesting and informative, concerns itself with textile processing with energetic synthetic detergent.—ARMOUR & COMPANY, 1355 West 31st St., Chicago, Ill.

730. **MONSANTO PLASTICIZERS**—An excellently prepared and unusually thorough and informative discussion of the subject and will be of interest to users of plastics and plasticizers. — MONSANTO CHEMICAL COMPANY, St. Louis 4, Mo.

738. **LEVELENE**—Booklet describing use of Levelene for leveling vat and direct colors. Also for stripping down vat colors.—AMERICAN ANILINE PRODUCTS, INC., New York, N. Y.

740. **MONSANTO CHEMICALS**—212 page illustrated buyers' guide for users of chemicals including useful tables, chemicals, information.—MONSANTO CHEMICAL COMPANY, St. Louis, Mo.

749. **LUPOMIN G**—Pamphlet outlines the application of the quaternary ammonium compound recommended for treating natural and synthetic fibres to give soft hand, lubrication, odorless finish, brighter shades, etc.—JACQUES WOLF & CO., Passaic, N. J.

752. **CAUSTIC SODA BOOK**—Elaborate 72-page text containing useful graphs, charts, diagrams and descriptive photographs designed for use of the technical men, buyers, executives, operating officials and engineers in textile mills.—COLUMBIA CHEMICAL DIVISION, PITTSBURGH PLATE GLASS CO., Pittsburgh 13, Pa.

755. **LUPOMIN**—Leaflet outlines the advantages of the cation active softener which is suitable for use on cotton, linen, silk, wool, synthetic fibres and mixed fabrics. A small percentage of lupomin gives a supple, smooth hand.—JACQUES WOLF & CO., Passaic, New Jersey.

756. **TEXTILE SPECIALTIES**—Listing and describing a wide and complete range of specialties manufactured and sold by American Cyanamid Company formulated to the latest advances in textile chemistry.—AMERICAN CYANAMID COMPANY, 30 Rockefeller Plaza, New York 20, N. Y.

758. **CEGLIN**—Attractive illustrated, booklet describing the application of ceglin (cellulose ether) to many types of fabrics.—SYLVANIA DIVISION, AMERICAN VISCOSE CORP., New York 17, N. Y.

759. **DRUCOMINE A**—An effective cationic finishing agent with minimum effect upon white fabrics and upon the shade and light fastness of dyestuffs.—E. F. DREW & CO., INC., Boonton, N. J.

760. **SYN-O-TOL CR** — A highly concentrated, non-sulfonated cocoanut amide condensate. Recommended for all wet cleaning operations. — E. F. DREW & CO., INC., Boonton, N. J.

762. **ONYX TECHNICAL DATA SHEETS**—Two new data sheets describing the use, advantages, and applications of Xyno Resins S 69 and Xyno Resin 382.—ONYX OIL & CHEMICAL COMPANY, Jersey City 2, N. J.

764. **GENERAL PRODUCTS LIST**—20 page illustrated booklet providing complete information on Hooker chemicals and outlining the specialized Hooker processes. — HOOKER ELECTROCHEMICAL COMPANY, Niagara Falls, N. Y.

765. **HOSIERY FINISHES AND FORMULAE**—Attractive new booklet describes the Amalgamated line of hosiery finishes and giving numerous finishing formulas.—AMALGAMATED CHEMICAL CORPORATION, Philadelphia 34, Pa.

766. **DU PONT PEROXIDE BLEACHING SYSTEMS**—New book illustrating and describing this continuous peroxide bleach system. Layouts and other information included.—E. I. DU PONT DE NEMOURS & CO., ELECTROCHEMICAL DEPT., Wilmington, Dela.

767. **STYMER**—Booklet describing the totally new sizing and finishing agent for rayons, cottons and worsteds.—MONSANTO CHEMICAL CO., St. Louis, Mo.

768. **TEXTILE CHEMICALS**—Buying guide and reference book giving facts about Amalgamated Products, the fabrics on which they give best results, their proper application, and their chemical composition.—AMALGAMATED CHEMICAL CORP., Philadelphia 34, Pa.

769. **SURFACE TENSION DEPRESSANT** — The Booklet, "Mercerizing and Alkamerce—The Ideal Dry Mercerizing Penetrant," introduces a new product which can be used as a wetting agent; a dye leveling agent, a penetrant in package dyeing.—HART PRODUCTS CORP., New York, N. Y.

770. **SPECIAL FINISHES FOR SERVICE, PROTECTION AND APPEARANCE**—Contains tabulated list under following categories: Water-Repellent, Waterproof, Absorbent, Antiseptic, Flameproofing, and Fireproofing, and Character Finishes, and Moth preventives. Trade names of 140 finishes listed.—UNITED STATES TESTING CO., Hoboken, N. J.

771. **"STARCH STABILIZER"** — Folder on Vanesta, a product used for textile sizing and printing, discussing stabilization and the results obtained. —R. T. VANDERBILT CO., New York 17, N. Y.

772. **"STANDARD SILICATE ALKALIES"** — Booklet descriptive of silicate and silicated alkalies and their uses. These uses include for silk weighting, in peroxide bleaching, boiling off cotton, textile finishing, etc. — DIAMOND ALKALI COMPANY, Cleveland, Ohio.

773. **TECHNICAL CHEMICAL DATA SHEETS**—Complete set for dyeing, printing and finishing operations, showing major operations, performance and advantages.—ONYX OIL & CHEMICAL CO., Jersey City 2, N. J.

774. **ROYCE TEXTILE CHEMICALS**—This booklet briefly describes the leading Royce products for textile processing printing, dyeing and finishing.—ROYCE CHEMICAL COMPANY, Carlton Hill, N. J.

KNITTING . . .

801. **THE WILDMAN SINGLE-HEAD FULL-FASHIONED HOSIERY MACHINE**—Literature on request from the WILDMAN MFG. CO., Full-Fashioned Division, Norristown, Pa.

803. **THE TUBE-TEX FOR TUBULAR KNIT GOODS**—Bulletin describing this modern machine which extracts, processes, dries, conditions and folds in one continuous operation, lowering costs, saving labor, power, space and waste.—H. W. BUTTERWORTH & SONS CO., Philadelphia, Pa.

809. **TEXACO IN THE KNITTING INDUSTRY**—Folder on knitting mill lubrication.—THE TEXAS CO., New York, N. Y.

811. **CIRCULAR KNITTING MACHINES**—Interesting, informative and well illustrated is this six-page folder, just released, which describes this company's small diameter circular knitting machine.—H. BRINTON COMPANY, Philadelphia 24, Pa.

813. **THE NEW REINER HIGH SPEED TRICOT MACHINE**—168" or 84" knitting widths. A richly illustrated catalog describing its many novel features of construction and performance. — ROBERT REINER, INC., Weehawken, N. J.

816. **THE NEW REINER KAYLOOM**—A combination Knitting Weaving Loom, featured in an illustrated catalog, showing filler attachment and other important points about this machine. — ROBERT REINER, INC., Weehawken, N. J.

817. **AUTOMATIC SELECTIVE STRIPPING MACHINE**—Descriptive and illustrative folder, entitled "If It's Stripes, Consult Brinton," now available. Important mechanisms involved in this process are described.—H. BRINTON COMPANY, Philadelphia, Pennsylvania.

818. **MILTON LIGHT METAL BEAMS FOR EVERY APPLICATION**—Catalog 45-A describing Light Metal Tricot Beams made in Standard and Special sizes plus Special Purpose Light Metal Textile Equipment.—MILTON MACHINE WORKS, INC., Milton, Pa.

820. **VARIABLE STRIPES AND PLAIDS** — Booklet describing Supreme Models SA and SA-ROF Stripers for knitting plaids, checks, "floatless" designs and variable stripes.—SUPREME KNITTING MACHINE CO., INC., Brooklyn 6, N. Y.

822. **HIGH SPEED JERSEY CIRCULAR MACHINE**—Complete illustrated brochure showing features and highlights of this 100 yard per hour producer. Also available — New Cylinder Chart. — SUPREME KNITTING MACHINE CO., INC., 105 Johnson Ave., New York.

828. **THE KIDDE KNITTER**—Bulletin describing the newest in Raschel-type warp knitting machines and the higher production rates attained with it.—KIDDE MANUFACTURING CO., INC., Bloomfield, N. J.

SEWING MACHINES . . .

911. **CONDENSED CATALOGUE**—Form 769, A 40-page pocket-size booklet illustrating and describing sewing machines adaptable to virtually all phases of the needle trades.—WILLCOX & GIBBS SEWING MACHINE CO., New York, N. Y.

912. **ELASTIC HEMMING AND INSERTING MACHINE**—Bulletin No. 833, illustrating and describing the improved high speed machine Style 992-5, for work on undergarments, dresses, pajamas, etc. — WILLCOX & GIBBS SEWING MACHINE CO., New York, N. Y.

MATERIALS HANDLING . . .

1001. **HOW TO DETERMINE WHERE OVERHEAD MATERIALS HANDLING EQUIPMENT CAN BE USED PROFITABLY** — Profusely illustrated. Gives clear, concise understanding of materials handling. Helps you to determine where and what equipment might be used to speed production and increase profits. — CLEVELAND TRAMRAIL DIV., Wickliffe, Ohio.

1002. **CATALOG NO. 22**—An attractive illustrated catalog describing in detail the Shamrock shipping containers and the new canvas trucks for textile use.—MEESE, INC., Madison, Ind.

1003. **CASTERS AND WHEELS**—192 pages, describing casters and wheels suitable for all types of industrial applications. Every mechanical engineer and purchasing agent should have this.—DARNELL CORP., LTD., Long Beach, Calif.

1005. **BASKETS, HAMPERS & TRUCKS**—This 24-page catalog is profusely illustrated and contains complete description on the Dandux line, especially designed for the textile industry.—C. R. DANIELS, INC., Daniels, Md.

1006. **LANE CANVAS BASKETS**—16 page illustrated booklet describing the Lane line of canvas baskets for textile use.—W. T. LANE & BROTHERS, Poughkeepsie, N. Y.

1007. **OVERHEAD HANDLING EQUIPMENT** — 56 pages of illustrations showing successful applications of monorail systems to meet every kind of handling problem. — THE AMERICAN MONORAIL CO., Cleveland, Ohio.

1008. **CASTERS AND WHEELS**—An illustrated booklet with complete specifications showing a complete assortment of Colson Textile Casters.—WRENN BROTHERS, 230 South College St., Charlotte, N. C.

1009. **CANVAS PRODUCTS**—A complete listing with illustrations of Dandux Canvas Products. For easy fingertip reference and handy file size. Brief but factual information.—C. R. DANIELS, INC., Daniels, Md.

1020. **CONVEYORS**—16-page booklet, No. 62, and entitled "Modern Time and Cost Savers," covers detailed information and illustrations on gravity rollers, wheel conveyors, supports, portable piling machines, belt conveyors, etc.—STANDARD CONVEYOR COMPANY, North St. Paul, Minn.

1025. **CAB-OPERATED AND FLOOR-OPERATED ELECTRIC HOISTS**—Bulletin No. 127 describing and illustrating electric hoists of various types and capacities. — SHEPARD NILES CRANE & HOIST CORP., Montour Falls, N. Y.

1026. **HEVI-LIFT ELECTRIC HOISTS**—Illustrated booklet describing the application of hoists ranging in capacity up to 15 tons in the textile industry. Gives suggested applications, detailed features and the 5-step variable speed full magnetic push-button control and seven types of mounting.—HARNISCHFEGER CORPORATION, Milwaukee 14, Wis.

1027. **SINGLE BEAM CRANES**—Bulletin No. 130 describing and illustrating the single beam type of overhead traveling cranes.—SHEPARD NILES CRANE AND HOIST CORP., Montour Falls, N. Y.

1028. **TRAV-LIFT CRANES**—Bulletin H13-1 describing P & H overhead traveling crane service.—HARNISCHFEGER CORP., Milwaukee 14, Wis.

1030. **C-D HOLLOW WARE**—This 32-page catalog, E-11, profusely illustrated in color, shows Continental-Diamond's line of boxes, trucks, cans, barrels, baskets and trays. Complete description and specification is given on each item.—CONTINENTAL-DIAMOND FIBRE CO., Newark 33, Del.

MISCELLANEOUS . . .

1101. **AUTOMATIC BOBBIN REFINISHER**—A descriptive bulletin illustrating and describing method of refinishing throwing bobbins on a production schedule.—J. M. NASH COMPANY, 2360 N. 30th St., Milwaukee, Wis.

1102. **BALING PRESSES**—An illustrated folder describing this manufacturer's complete line of balers for all materials. Both Downstroke and Upstroke models.—ECONOMY BALER CO., Ann Arbor, Mich.

1103. **UNBRAKO SCREWS** — Illustrated 16-page booklet No. 570 gives data on Unbrako hollow set screws, with knurled point, self-locking features. Includes miscellaneous screw and locking nut data.—STANDARD PRESSED STEEL CO., Jenkintown, Pa.

1104. **INTERPRETATION OF ANALYSIS** — In compiling this brief collection of terms which most frequently appear in analysis of surface active chemicals, an attempt has been made to explain as clearly as possible the meaning of these terms to those who have had little or no chemical training. —NOPCO CHEMICAL CO., Harrison, N. J.

1105. **MILL NOTES**—This is a mimeographed six-page pamphlet published every month containing information of new developments in process manufacturing and testing of interest to woolen and cotton mills. Mailed free to interested readers on request.—UNITED STATES TESTING CO., Hoboken, N. J.

1107. **AUTOMATIC QUILL POLISHER**—Bulletin describes production machine for refinishing loom bobbins. Tells how quills can be kept in perfect condition at minimum labor cost.—J. M. NASH CO., 2360 N. 30th Street, Milwaukee 10, Wis.

1108. **FABRICATION OF U. S. STAINLESS STEELS**—136 page book covering use of stainless steel in textile equipment from cutting to cleaning. Includes corrosion-resistance table for chemicals.—CARNEGIE-ILLINOIS STEEL CORPORATION, Pittsburgh, Penn.

1111. **BRUSHES**—A 28-page booklet is now available which describes and illustrates this manufacturer's line of brushes for the textile industry.—GASTONIA BRUSH COMPANY, Gastonia, N. C.

1113. **FLUORESCENT INSPECTION UNIT**—Data available which describes this new fixture, which employs fluorescent lamps behind a diffusing panel of flashed opal glass, with details of construction, advantages and complete specifications. — SALEM MANUFACTURING CO., Salem, Mass.

TEXTILE INDUSTRIES, 806 Peachtree St., N.E., Atlanta 5, Ga.

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Personal Notes

(*Continued from page* 216)

buying, has joined the Whitman company and will specialize in the selling of yarns.

Robert M. Frederich, formerly in the men's wear division of Burlington Mills, has joined Pacific Mills in New York and will assist the merchandising manager of the rayon department.

Burke M. McConnell has tendered his resignation as a vice-president and director of Burlington Mills Corp.

Harold R. Williams has been chosen to succeed the late Charles E. Hathaway as sales agent for Renfrew Bleachery, Travelers Rest, S. C.

Jack Swann, superintendent of the worsted division of Shawmut (Ala.) Mills, has been named general manager of the Wehadkee Yarn Mills, Talladega, Ala. He succeeds the late **Horace B. Burks.**

Dean Richard S. Cox of the Philadelphia Textile Institute, Philadelphia, Pa., celebrated his 50th Anniversary with the Institute last April 21st. Mr. Cox will continue to serve as dean at the new location of the school in Germantown this fall.

Samuel L. Abbott has been appointed president of Abbott Machine Co., Abbott Worsted Mills and Hillsborough Mills, Wilton, N. H., succeeding his father, the late E. J. Abbott, **William M. Abbott,** brother of the new president, is now treasurer of the Abbott Machine Co. and Abbott Worsted Mills. An uncle, **William G. Abbott,** continues as treasurer of Hillsborough Mills.

Obituaries

Ben T. Comer, Sr., president of both the Comer Machinery Co., Atlanta, Ga., and the Comer-Whittier Shop, Tucker, Ga., died April 29 in a private hospital.

L. Cooper Smith, agent at Columbia (S.C.) Mills for a period of 21 years, died suddenly last May.

Zim Franklin Cranford, 69, general manager of Craftspun Yarns, Inc.,

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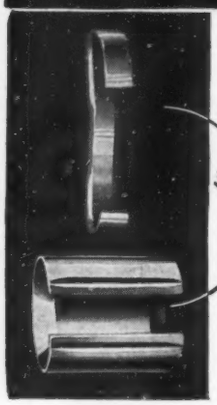

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SOUTHERN OFFICES: ATLANTA, GA. - - - - SPARTANBURG, S. C.

John:

Those analyses which the Penick & Ford Textile Laboratory in Atlanta made for us certainly helped solve our warp sizing problems.

Jim

Kings Mountain, N. C., died of a heart attack at his home last March.

Arthur J. Gardiner, vice-president of Shamokin (Pa.) Dye & Print Works, Inc., died recently.

Ishmael W. Curtis, 74, who retired as superintendent of the Anthony (R. I.) Mill of Berkshire Fine Spinning Associates in 1943, passed away April 9.

Raymond N. McAdams, 65, former secretary of Hercules Powder Co., Wilmington, Del., died April 9 at the Delaware Hospital of a heart ailment.

Clifton Slusser, 56, vice-president of The Goodyear Tire & Rubber Co., Akron, Ohio, and an outstanding production expert, passed away March 25 in an Akron hospital following years of failing health.

E. O. Steinbach, 58, vice-president and general manager of Mayfair Mills, Arcadia, S. C., died April 13 in the Spartanburg General Hospital following a brief illness.

Mortimer Cohn, 45, vice-president of Tubular Textile Machinery Corp., Woodside, N. Y., died suddenly last March 11.

Ernest A. Flach, 54, a partner in the Dublin Hosiery Mills, near Philadelphia, Pa., passed away in an Abington, Pa., hospital last April.

Robert C. Graham, 65, secretary assistant treasurer and office manager of the affiliated firms of Virginia Maid Hosiery Mills, Wallner Silk Hosiery Mills and Acme Hosiery Dye Works, died April 11 at his home in Pulaski, Va.

Robert Knight Eaton, 65, former acting dean of Clemson (S. C.) Textile School, died at his home recently following an illness of two weeks.

Frederick C. Hall, 71, clerk and general superintendent of Old Colony Mfg. Corp., died suddenly April 12 in Taunton, Mass.

James McNamee, founder of Spa Knitting Co., Ballston Spa, N. Y., died recently of a cerebral hemorrhage.

James S. McAlister, 83, secretary-treasurer and co-founder of Nantuckett and Lilly Mills, Spray, N. C., passed away in April.

John F. Scott, Sr., 58, president of Scott Hosiery Mills, Inc., Newton, Pa., died last April at the Abington Memorial Hospital after a long illness.

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Engineered for Production

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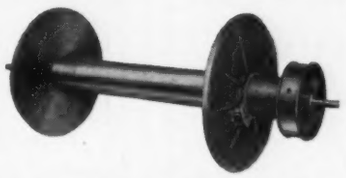
for BROAD, NARROW FABRIC, RIBBON, VELVET, CARPET LOOMS

BROADLOOM BEAMS



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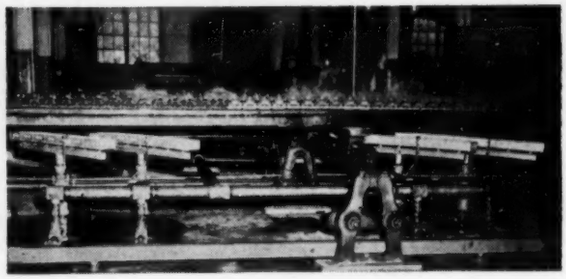

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ON RAYONS

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ITT Uniformity Meter

(*Continued from page* 91)

The machine makes use of two condenser plates between which the yarn passes, the dielectric strength of the condenser varying with the mass of the yarn being tested.

Yarn is tested at 5-10 feet per second, while sliver and roving, because of their lesser strength, are tested at the much slower speed of 3-6 inches per second to avoid breakage in passing between the condenser plates. It is possible, however, to run strong yarns at as high as 60 feet per second.

A record of the uniformity of the material being tested is recorded on a graph paper tape. This tape may be run slowly to give a tight graph, or it may be run fast to give an open picture of the ups and downs in yarn weight per inch, per foot, or per yard. The equipment may also be set to integrate its findings so that only the important variations are indicated.

The accuracy of the Uniformity Meter has been tested by making a chart of a length of yarn on the machine and then taking this same piece of yarn, cutting it into small lengths, weighing these lengths, and plotting the weights on graph paper tape. In every test, the meter has given an accurate picture of actual variations in yarn weight.

A skilled operator, using this machine, can track down troubles causing lack of yarn uniformity and point out the manufacturing process to which the trouble may be attributed.

Winding Machines, Principles and Practices

(*Continued from page* 143)

driven by two motors, one on each side of the machine and driving the traverse shaft by V-belts, as shown in Fig. 130. Since the drive on each side is entirely independent of the other, one side may be stopped while the other is running, or different yarn speeds may be used on the two sides. Table 15 gives motor pulley diameters, traverse shaft pulley diameters, etc., for different yarn speeds on both coning and tubing.

In changing pulleys, it is usually necessary to raise the motor, the motor base being adjustable vertically over a distance of about six inches. It is not good practice to force the V-belts over the sheaves without first raising the motor to permit enough slack for the purpose.

After changing a pulley, either on the motor or traverse shaft, the motor should be lowered until the two sides of the V-belts can be pressed together to within about two inches of touching. Proper tension on the V-belts is important, but too much tension will cause overheating on the motor and traverse shaft bearings; not enough tension will cause slippage, resulting in lost production and unnecessary wear on the belts.

Finally, the motor should be checked to be sure that it is level, by placing a level across the top of the motor pulley.

(Article 22, to appear in an early issue, will begin the discussion of maintenance on the Roto-Coner.)

Yarn Preparation Practices

(*Continued from page* 133)

and filling twisters and handling these when detected. The majority of the steps recommended are contained in the reply of **Mill II** as presented herewith:

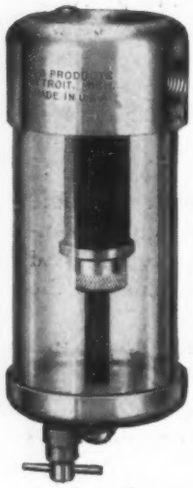
To prevent as much as practical our singles on twisters, we do the following:

1. Keep creels clean.
2. Keep our creel cheese cores turning freely.
3. Use thread guides as close to bottom cheese in creel as possible and force the end to pull to center of cheese thus keeping end from falling off the side of the cheese and breaking.
4. Keep creels tight and in line.
5. Keep our cheese pieces back wound periodically.
6. Keep our cheese arms on spooler lined.
7. Keep cheese cores on spooler in good condition.
8. Keep spooler making a firm tight cheese.
9. Use smooth boxes to transport yarn in.
10. Check spoolers to see that

TABLE 15. Drive Specifications for Roto-Coner. Drive motors, 1700 rpm; pilot motor, 1200 rpm. Key to numerical code: 1. Average yards per minute throughout package after allowance for slippage. 2. Motor speed, 1700 rpm, full load. 3. Ratio, rpm of traverse shaft to rpm of switch sprocket: 60 to 1 (pilot motor, 1200 rpm). 4. Maximum speed recommended for ⅝ paper tubing. 5. Maximum speed recommended for 9° 15′ and 9° 36′ paper coning.

YARDS PER MINUTE①			TRAVERSE SHAFT R.P.M.	MOTOR② PULLEY PITCH DIAM.	TRAVERSE PULLEY PITCH DIAM.	BELT LENGTH	Switch Sprocket③ Number of Teeth and Chain Length			
							CONING		TUBING	
9°15′ 9°36′ CONE	5°57 CONE	TUBING					Sprocket	Chain Length	Sprocket	Chain Length
245	258	264	1032	3.4"	5.6"	68.9"	20	40.5"	26	42
318	334	342	1335	4.4"	5.6"	69.5"	"	"	24	41.5"
330	346	355	1385	4.4"	5.4"	"	"	"	"	"
356	374	383	1496	4.4"	5.0"	"	"	"	"	"
371	389	399	1558	4.4"	4.6"	"	"	"	"	"
387	406	417	1626	4.4"	4.6"	"	"	"	"	"
404	425	435	1700	4.4"	4.4"	"	18	40"	20	40.5"
423	444	455	1777	4.6"	"	72.5"	"	"	"	"
441	463	475	1854	4.8"	"	"	"	"	"	"
459	482	495	1931	5.0"	"	"	"	"	"	"
478	502	515	2009	5.2"	"	"	"	"	"	"
496	521	535	2086	5.4"	"	"	"	"	"	"
515	541	554	2163	5.6"	"	"	16	39.5"	18	40"
533	560	574	2241	5.8"	"	"	"	"	"	"
551	579	594	2318	6.0"	"	"	"	"	"	"
⑤	599	④	2395	6.2"	"	"	"	"	"	"
	618		2472	6.4"	"	76.5"	"	"	16	39.5"
	657		2627	6.8"	"	"	"	"	"	"
	695		2781	7.2"	"	"	"	"	"	"
	715		2859	7.4"	"	"	"	"	"	"
	753		3013	7.8"	"	"	"	"	"	"

Do You Have WATER, DIRT or SLUDGE IN YOUR AIR-LINES?



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This is a reprint of 26 pages 8½ x 11 of a series of articles which were previously published in "Textile Industries," containing valuable information, illustrations, tables, charts and diagrams.

Fay H. Martin was a recognized authority on the roving frame. This book has been adopted by textile schools and vocational schools. May be secured in conjunction with a 3-year subscription to "Textile Industries" for $5.00 (Foreign, $11.00).

TEXTILE INDUSTRIES
806 Peachtree St., N.E. Atlanta 5, Georgia

yarn is not cut or tangled by the traveler.

When singles or doublings do appear on our warp twisters, the twister tender does the following:

1. Breaks end back.
2. Runs off singling or doubling on the spindle the end was running on.
3. Ties end back up and starts it running.
4. Marks thread guide cap with chalk on this end.
5. When frame is out to doff, goes back to these marks and lifts these bobbins out separately from those which have not broken down.
6. Puts this yarn into separate box.
7. When box is full, yarn is respooled on old type spooler and when a creel of this "knot yarn" has accumulated, it is run through creel beamer. Our twisters are equipped with yardage knock-offs.

On our filling twisters we do the following to singles and doubles:

Doffer or frame hand finds singles or doubles and takes them out separately.

If single or double is caught before the build of the quill has gone too far for a re-tie, the single or double is run off or pulled off on spot and re-tied, allowing it to fill up with the balance of the quills. If single or double has gone too far for it to be practical to re-tie, it is carried to a reel and reeled off into waste.

Carpet Manufacturers Face '49 Cautiously

Gathered at the spring meeting of the Carpet Institute, Inc., at the Waldorf-Astoria on April 13th, carpet producers generally conceded that price readjustments to conform with current economic levels are necessary if business activity is to continue on high level.

Confirmation came from Jules Bachman, associate professor of economics, New York University, who said in the opening address, "Sales can be maintained," but "manufacturers and distributors must adapt imaginative promotion programs."

Dr. Bachman predicted that "corporate profits will show a significant decline" resulting from declining prices, moderate reductions in volume, and the inability to cut costs as quickly as prices.

Rene Lutz, analyst for the U. S. Department of Commerce, saw an easing of the squeeze between high priced wools and the insistance of the consumer for lower priced carpets. Said Mr. Lutz, "Stocks of wool in this country have been built up. Supply channels have been reestablished and strengthened. Stocks of carpeting have accumulated. All of these factors have already had, and will continue to have, an effect on the previous upward pressure on imports and prices of carpet wools."

Concluding the morning session, Edward B. Weiss, Director of Merchandising, Grey Advertising Agency, called upon the carpet industry to make its appeal to the mass buyer, and build its production facilities in that direction. He urged closer coordination between manufacturer and retailer.

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Prominent New York manufacturer of equipment for the textile and finished apparel industries, is interested in financing new inventions. All information will be strictly confidential and the rights of the inventor properly protected. Write Box 296, TEXTILE INDUSTRIES, 806 Peachtree St., N.E., Atlanta 5, Georgia.

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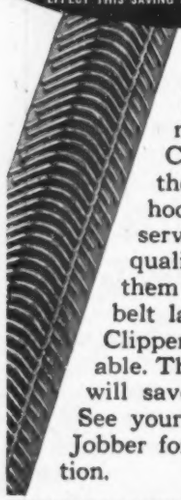

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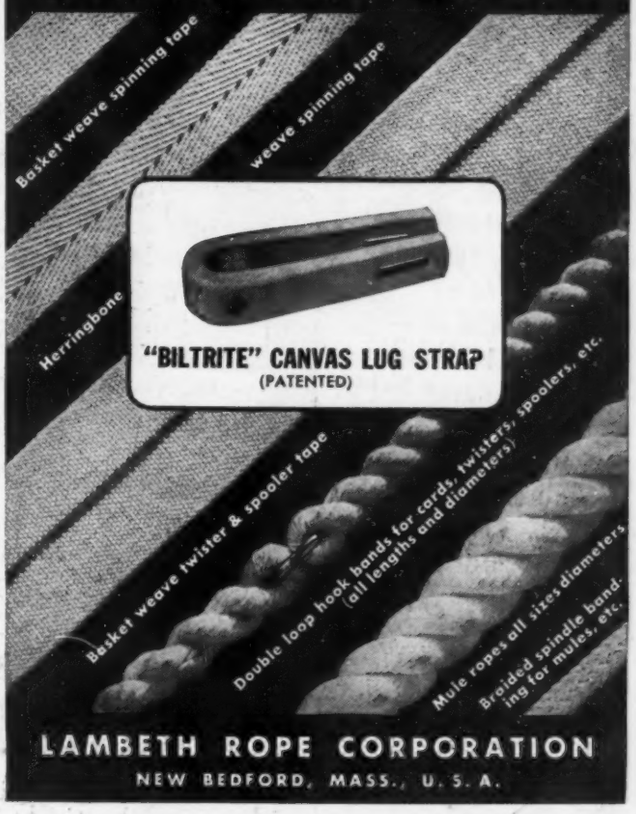
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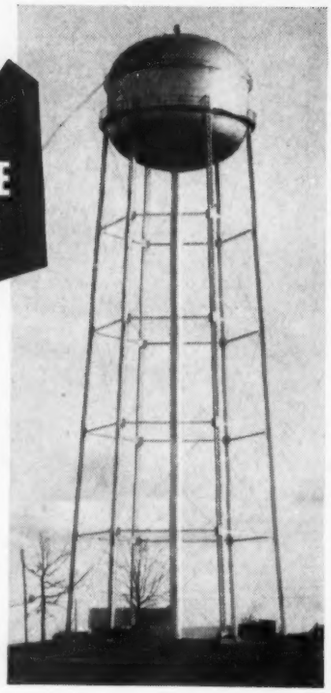

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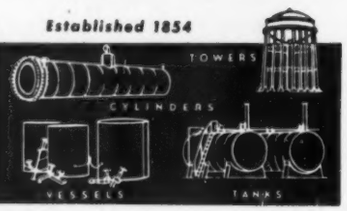

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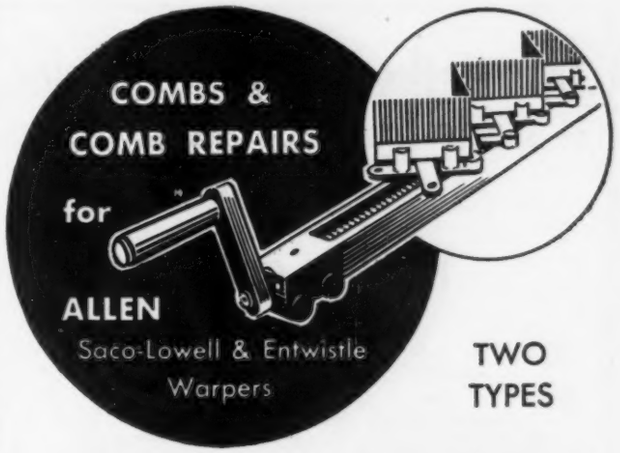

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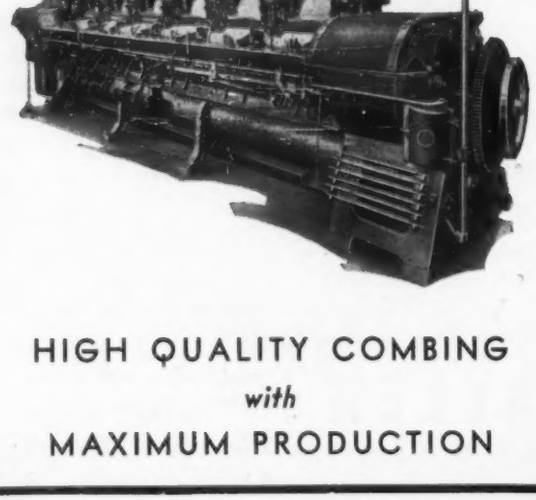

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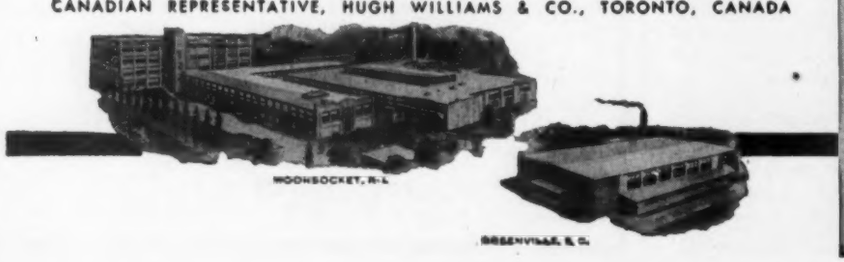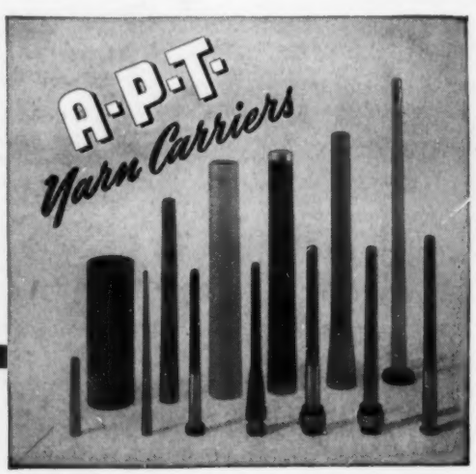
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